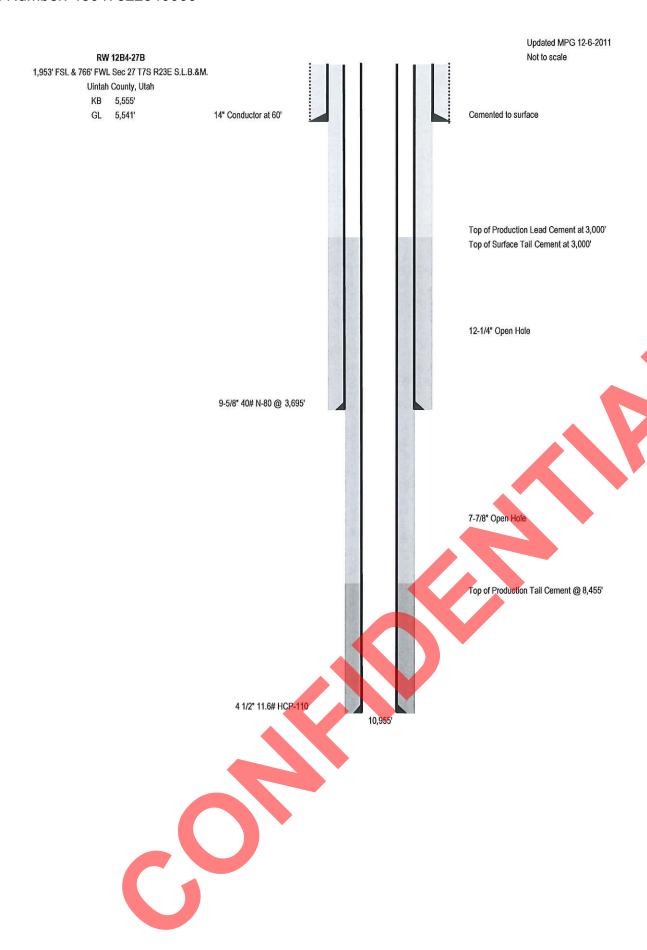
STATE OF UTAH  DEPARTMENT OF NATURAL RESOURCES  DIVISION OF OIL, GAS AND MINING							FORM 3  AMENDED REPORT							
		А	PPLICATIO	N FOR F	PERMIT TO DRILL	-			1. WELL NAME and	NUMBER RW 12B	4-27B			
2. TYPE OF WORK  DRILL NEW WELL REENTER P&A WELL DEEPEN WELL 3									3. FIELD OR WILDO	RED W	ASH			
								5. UNIT or COMMUI	NITIZATI RED W		EMENT I	NAME		
6. NAME OF OPERATOR  QEP ENERGY COMPANY									7. OPERATOR PHO					
8. ADDR	ESS OF OPE			n, Vernal, Ut, 84078				9. OPERATOR E-MA	IL		com			
	ERAL LEASE AL, INDIAN,	NUMBER			11. MINERAL OWNE	- T			debbie.stanberrry@qepres.com  12. SURFACE OWNERSHIP					
		UTU-0933	ox 12 = 'fee'		FEDERAL IND	INDIAN STATE FEE FEDERAL INDIAN STATE FEE  14. SURFACE OWNER PHONE (if box 12 = 'fee')								
		RFACE OWNER (							16. SURFACE OWN					
151 ADD		NI ACE OWNER (	50% 12 -		10 INTEND TO COM	IMTNOLE PRODUC	TTON ED	OM	19. SLANT		- (II BOX		- ,	
	IAN ALLOTTI  2 = 'INDIAN	EE OR TRIBE NA I')	ME		MULTIPLE FORMATI	IONS						AL 🔵		
20. LO	CATION OF V	/ELL		FOC	OTAGES	QTR-QTR	SEC	CTION	TOWNSHIP	RAI	NGE	MER	IDIAN	
LOCAT	ON AT SURF	ACE		1953 FS	L 766 FWL	NWSW		27	7.0 S	23.	0 E	S		
Top of	Uppermost F	Producing Zone		1953 FS	L 766 FWL	NWSW		27	7.0 S	23.0 E		S		
At Tota	l Depth			1953 FS	L 766 FWL	NWSW		27	7.0 S		23.0 E		S	
21. COU	NTY	UINTAH			22. DISTANCE TO N	EAREST LEASE LI 766	NE (Feet		23. NUMBER OF AC	<b>RES IN D</b> 560		UNIT		
					25. DISTANCE TO N (Applied For Drilling		SAME PO	<b>26. PROPOSED DEPTH</b> MD: 10955 TVD: 10955						
27. ELE\	/ATION - GR	OUND LEVEL 5542			28. BOND NUMBER	ESB000024			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE A36125 - 49-2153					
					Hole, Casing,	and Cement In	formati	ion						
String		Casing Size	Length		t Grade & Threa				Cement				Weight	
Surf	12.25	9.625	0 - 3695	40.0	N-80 LT&C	0.0		Halliburton Light , Type Unknown 460 Halliburton Premium , Type Unknown 240			3.12 1.47	11.0		
Brod	Bred 7.975 4.5 0.10055 11.5				HCP-110 LT8/	C 10.5	_				3.18	11.0		
<b>Prod</b> 7.875 4.5 0 - 10955 11.6 HCP-110 LTS					Her Tro Erac	10.5							13.5	
ATTACHMENTS														
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES														
WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER							COMPLETE DRILLING PLAN							
AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE						ACE) FOR	FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER							
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY TOPOGRAPHICAL MAP														
NAME Jan Nelson TITLE Permit					TITLE Permit Age	ent	<b>PHONE</b> 435 781-4331							
SIGNATURE DA					<b>DATE</b> 12/07/201	.1	EMAIL jan.nelson@qepres.com							
API NUMBER ASSIGNED 43047522340000					APPROVAL		Permit Manager							

# QEP Energy Company RW 12B4-27B Summarized Drilling Procedure

- 1. Construct location per plat.
- 2. MIRU air drilling rig.
- 3. Pre-set conductor.
- 4. Nipple up diverter system.
- 5. Drill 12-1/4" hole to 3,695' with air/mist.
- 6. RIH with 9-5/8" 40# N-80 casing and cement same per program.
- 7. RDMO air drilling rig.
- 8. MIRU conventional drilling rig.
- 9. NU and test 5M BOPE.
- 10. Drill 7-7/8" hole from 10,955' using conventional mud systems.
- 11. Log well. Triple or Quad-Combo (GR, NEU/DEN, IND, RES, SON)
- 12. RIH with 4-1/2" 11.6# HCP-110 casing and cement same per program.
- 13. Pressure test casing.
- 14. ND BOP's and NU remainder of wellhead. Set BPV.
- 15. RDMO.





QEP ENERGY COMPANY RW 12B4-27B Uintah County, Utah Section 27-T7S-R23E

#### DRILLING PROGRAM

# ONSHORE OIL & GAS ORDER NO. 1 Approval of Operations on Onshore Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil & Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

#### 1. Formation Tops

The estimated top of important geologic markers are as follows:

<u>Depth</u>
Surface
2,836'
3,645'
6,815'
8,455'
10,855'
10,955

## 2. Anticipated Depths of Oil, Gas, Water, and Other Mineral Bearing Zones

The estimated depths at which the top of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered as follows:

Substance	<u>Formation</u>	<u>Depth</u>
Oil	Green River	2,836'
Gas	Wasatch	6,815'
Gas	Mesaverde	8,455
Gas	Sego	10,855

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right A36125 (which was filed on May 7, 1964)

QEP ENERGY COMPANY RW 12B4-27B Uintah County, Utah Section 27-T7S-R23E

or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. All water resulting from drilling operations will be disposed of at Red Wash Central Battery Disposal site; SWSE, Section 27, T7S, R23E or Wonsits Valley Disposal Site; SWNW, Section 12, T8S, R21E.

## 3. Operator's Specification for Pressure Control Equipment

- A. An 11" 5000 psi double ram with blind rams and pipe rams, annular preventer and drilling spool or BOP with 2 side outlets.
- B. All BOP connections subject to pressure shall be flanged, welded or clamped.
- C. Kill line (2" min), 2 choke line valves (3" min), choke line (3" min), 2 kill line valves (2" min) and a check valve, 2 chokes with one remotely controlled from rig floor and a pressure gauge on choke manifold.
- D. Upper and Lower Kelly cock valves with handles and safety valve and subs to fit all drill string connections.
- E. IBOP or float sub available.
- F. Fill up line must be installed above the uppermost preventer.
- G. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 50 percent of internal yield pressure of casing whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc..., for a 5M system and individual components shall be operable as designed.

#### 4. Casing Design:

Hole Size	Csg. Size	Top (MD)	Bottom (MD)	Wt.	Grade	Thread	Cond.	Expected MW(ppg)
17 ½"	14"	Sfc	60'	Steel	Conductor	None	Used	N/A
12-1/4"	9-5/8"	Sfc	3,695	40#	N-80	LTC	New	Air
7 7/8"	4-1/2"	Sfc	10,955	11.6#	HCP-110	LTC	New	10.5

QEP ENERGY COMPANY RW 12B4-27B Uintah County, Utah Section 27-T7S-R23E

	Casin	g Strengths:	Collapse	Burst	Tensile (min)	
9-5/8"	40#	N-80	LTC	3,090 psi	5,750 psi	916,000 lb.
4 1/2"	11.6#	HCP-110	LTC	8,830 psi	10,710 psi	279,000 lb.

#### **Casing Design Factors**

\*The casing prescribed above meets or exceeds the below listed design factors.

Burst: 1.2 Collapse: 1.2 Tension: 1.6

Maximum anticipated mud weight: 10.5 ppg Maximum anticipated surface treating pressure: 7,200 psi

#### 5. <u>Cementing Program</u>

## 9-5/8" Surface Casing:

Lead Slurry: Surface (TOC) – 3,000°. 460 sks (1409 ft³) Halliburton Extendacem, 1 pps Granulite TR 1/4, 0.125 pps Poly-E-Flake, Slurry Weight 11.0 ppg, 3.12 ft³/sk, 50% XS in open hole only.

**Tail Slurry: 3,000' – 3,536'.** 240 sx (344 ft<sup>3</sup>) Halliburton Econocem, 0.2% HR-5 Retarder, 1.0 pps Granulite TR 1/4, 0.125 pps Poly-E-Flake, Slurry Weight 13.5 ppg, 1.47 ft<sup>3</sup>/sk, 50% XS in open hole.

#### 4-1/2" Production Casing\*:

**Lead Slurry: 3,000' (TOC)** – **8,455'.** 590 sks (1,852 ft<sup>3</sup>) Halliburton Extendacem, 1 pps Granulite 1/4, 0.125 pps Poly–E–Flake. Slurry Weight 11.0 lb/gal, 3.18 ft<sup>3</sup>/sk, 50% excess over gauge in open hole only.

**Tail Slurry: 8,455' – 10,955'**. 490 sks (796 ft<sup>3</sup>), Halliburton Expandacem, 0.3% Super CBL (Expander), 0.6% HR-800 (Retarder), 1 pps Granulite TR ¼, 0.125 pps Poly-E-Flake (LCM). Slurry Weight 13.5 lb/gal, 1.65 ft<sup>3</sup>/sk, 50% excess over gauge hole.

<sup>\*</sup>Final cement volumes to be calculated from caliper log, if run.

QEP ENERGY COMPANY RW 12B4-27B Uintah County, Utah Section 27-T7S-R23E

#### 6. <u>Auxiliary Equipment</u>

- A. Kelly Cock yes
- B. Float at the bit Yes
- C. Monitoring equipment on the mud system PVT/Flow Show
- D. Full opening safety valve on the rig floor Yes
- E. Rotating Head Yes
- F. Request for Variance:

Drilling surface hole with air:

A variance from 43 CFR 3160 Onshore Oil and Gas Order #2, Section III Requirements, subsection E. Special Drilling Operations is requested for the specific operation of drilling and setting surface casing on the subject well with a truck mounted air rig. The variance from the following requirements of Order #2 is requested because surface casing depth for this well is 50' into the Mahogany Bench formation and high pressures are not expected.

- 1. **Properly lubricated and maintained rotating head** A diverter system in place of a rotating head. The diverter system forces the air and cutting returns to the reserve pit and is used to drill the surface casing.
- 2. Blooie line discharge 100 feet from wellbore and securely anchored the blooie line discharge for this operation will be located 50 to 70 feet from the wellhead. This reduced length is necessary due to the smaller location size to minimize surface disturbance.
- 3. Automatic igniter or continuous pilot light on blooie line a diffuser will be used rather than an automatic pilot/igniter. Water is injected into the compressed air and eliminates the need for a pilot light and the need for dust suppression equipment.
- 4. Compressors located in the opposite direction from the blooie line a minimum of 100 feet from the wellbore compressors located within 50 feet on the opposite side of the wellbore from the blooie line and is equipped with a 1) emergency kill switch on the driller's console, 2) pressure relief valves on the compressors, 3) spark arrestors on the motors.
- 5. Well Kill Fluid A suitable amount of water and weighting agents will be available in the reserve pit during air drilling operations to kill the well, if necessary. No overpressured zones are expected in the area.
- 6. **Deflector on the end of the blooie line** QEP will mount a deflector unit at the end of the blooie line for the purpose of changing the direction and velocity of the air and cuttings flow into the reserve pit. Changing the

QEP ENERGY COMPANY RW 12B4-27B Uintah County, Utah Section 27-T7S-R23E

> velocity and direction of the cuttings and air will preserve the pit liner. In the event the deflector washes out due to erosion caused by the sand blasting effect of the cuttings, there will be no problem because the deflector is mounted on the very end of the blooie. A washed out deflector will be easily replaced.

- 7. Flare Pit there will be no need of a flare pit during the surface hole air drilling operation because the blooie line is routed directly to the reserve pit. When the big rig arrives for the main drilling after setting surface casing, a flare box will be installed and all flare lines will be routed to the flare box.
- G. Drilling below the 9-5/8" casing will be done with water based mud. Maximum anticipated mud weight is 10.5 ppg.
- H. No minimum quantity of weight material will be required to be kept on location.
- I. Gas detector will be used from intermediate casing depth to TD.

#### 7. Testing, logging and coring program

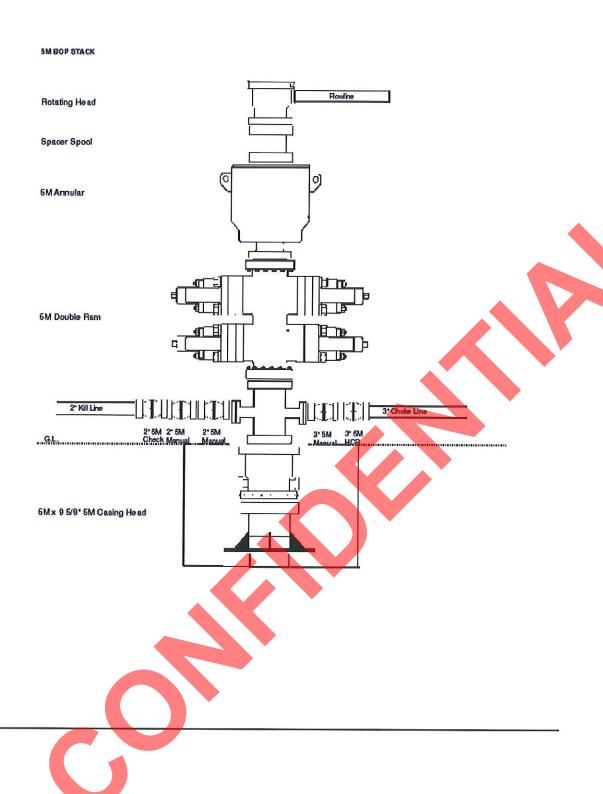
- A. Cores none.
- B. DST none anticipated
- C. Logging Mud logging Intermediate Casing to TD OH Logs: GR-SP-Induction, Neutron Density.
- D. Formation and Completion Interval:
  - Stimulation will be designed for the particular area of interest as encountered.

# 8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards

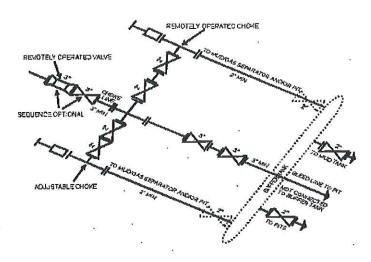
No abnormal temperatures or pressures are anticipated. Maximum anticipated bottom hole pressure equals approximately 5,981 psi. Maximum anticipated bottom hole temperature is 205° F.

H2S has not been encountered in other wells drilled to similar depths in the general area.

QEP ENERGY COMPANY RW 12B4-27B Uintah County, Utah Section 27-T7S-R23E



**QEP ENERGY COMPANY** RW 12B4-27B Uintah County, Utah Section 27-T7S-R23E

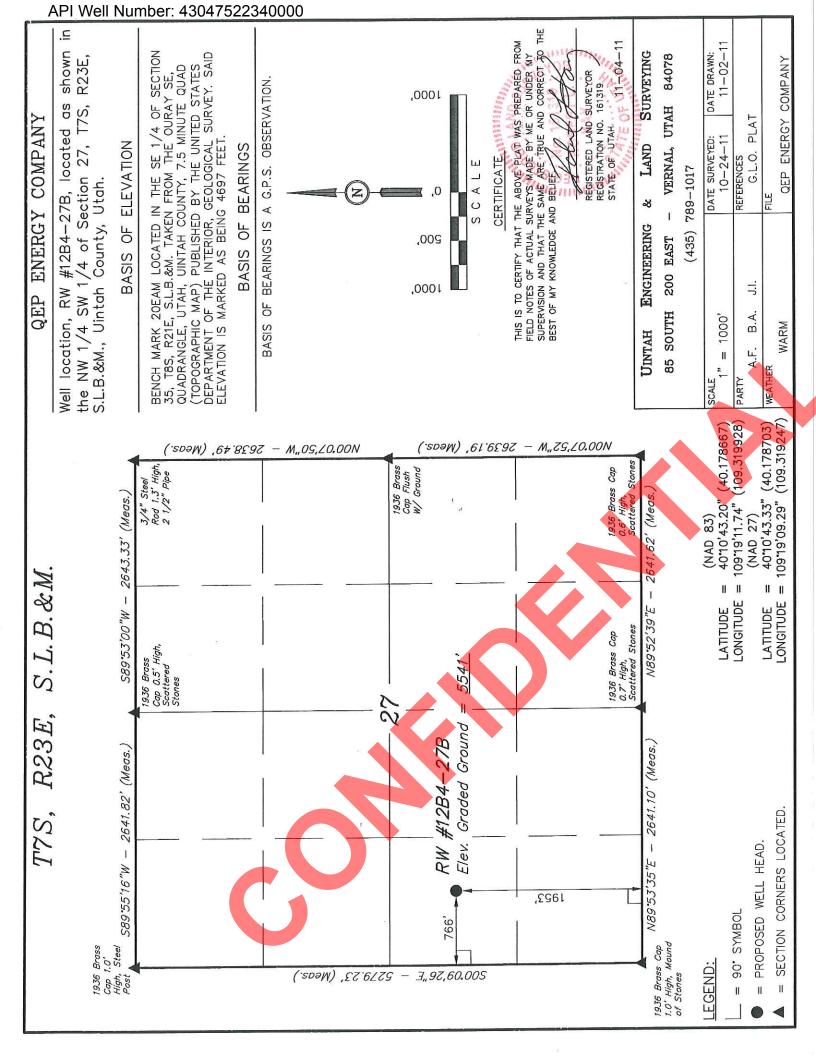


5M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY

Abbush we required for any of the choke minifold systems, buffer tanks are accordings installed drawningers of the choke assemblies for the purpose of generalizating the bleed lines together. When buffer tanks are employed, values shall be installed spream to include a planer or multination without interrupting flow control. Though not shown on 264, 384, 1084, OR 1534 drawings, it would also be applicable to those shallows.

[54 FR 79528, Sept. 27, 1989]





# QEP ENERGY COMPANY RW #12B4-27B LOCATED IN UINTAH COUNTY, UTAH

SECTION 27, T7S, R23E, S.L.B.&M.

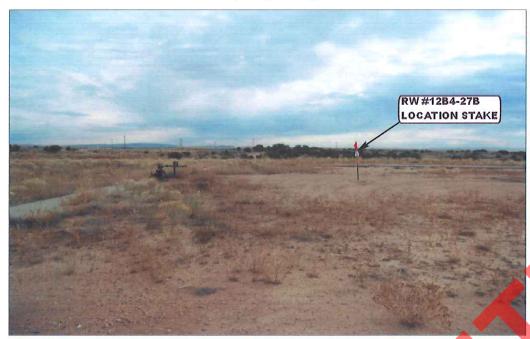


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: EASTERLY

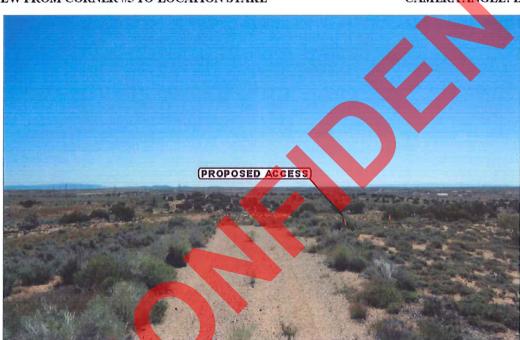


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERAANGLE: EASTERLY



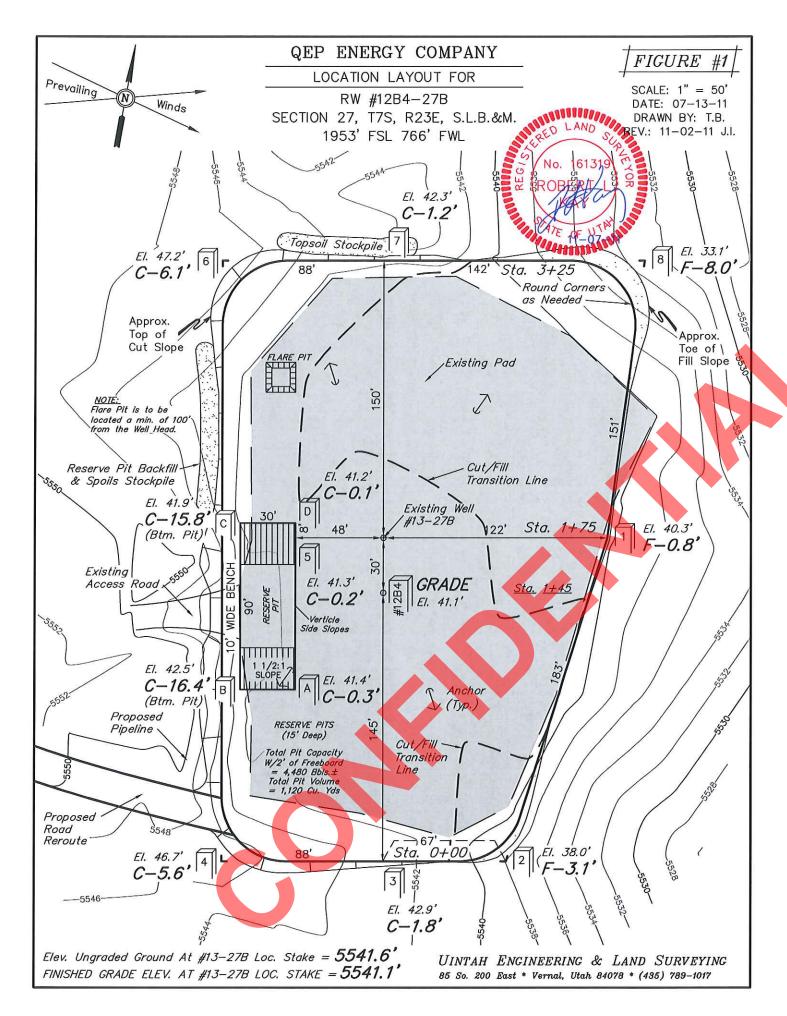
Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 (435) 789-1017 \* FAX (435) 789-1813

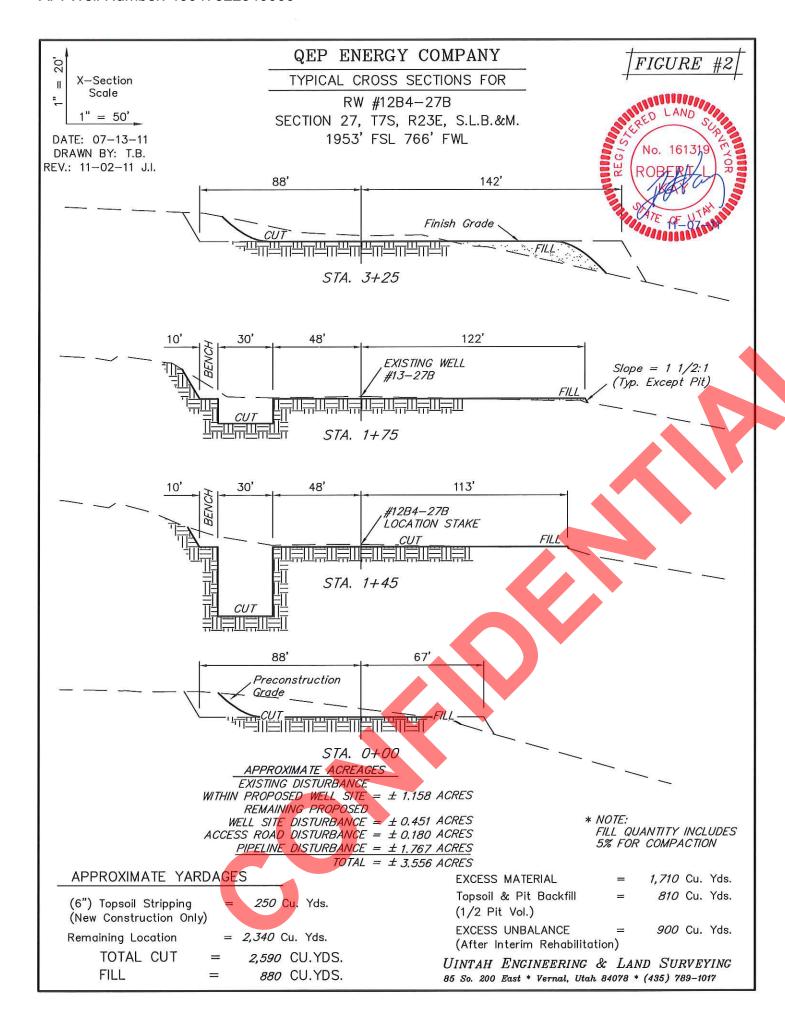
LOCATION PHOTOS

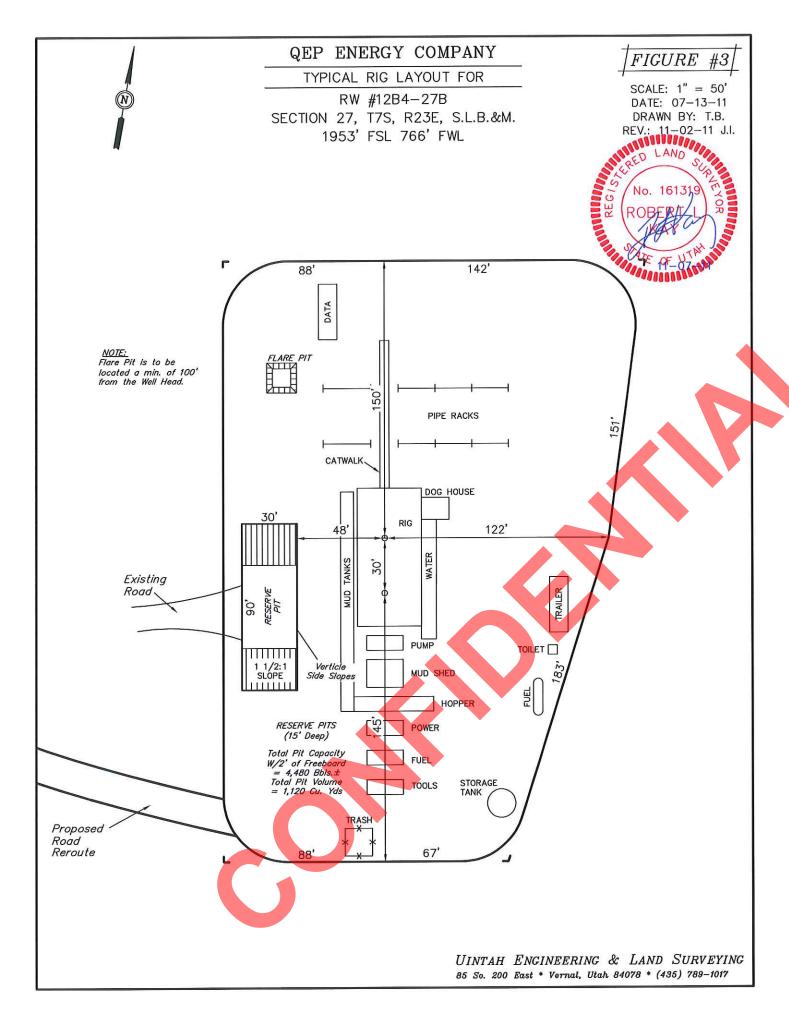
O7 08 11 MONTH DAY YEAR

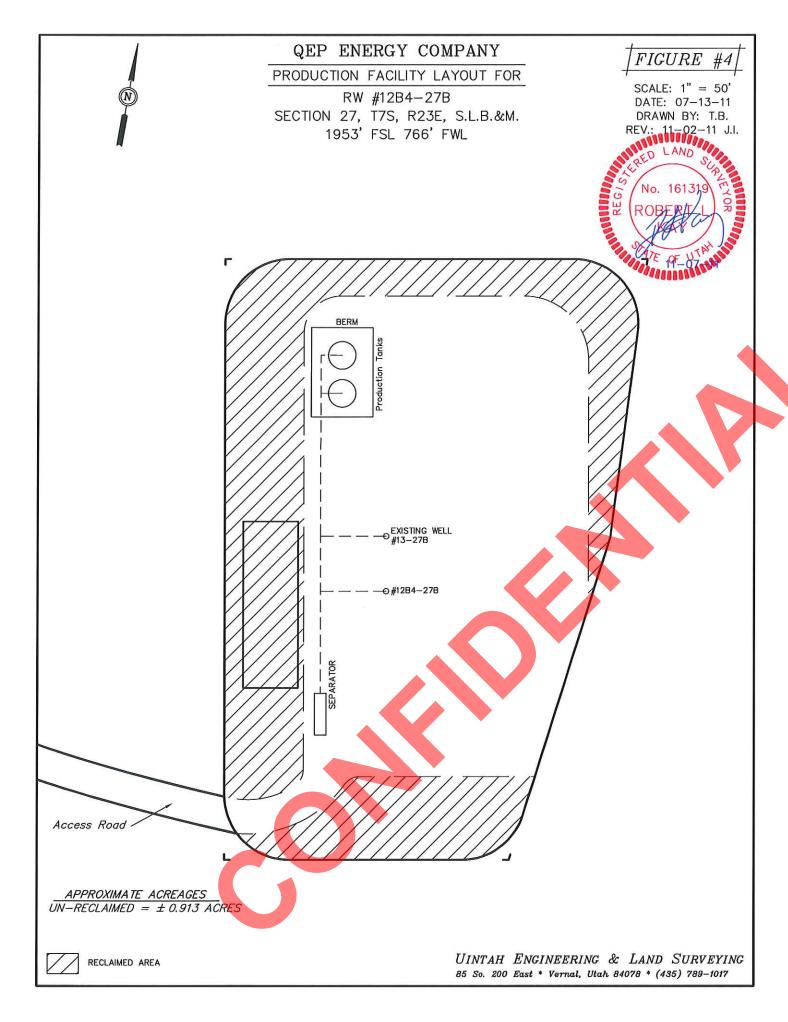
РНОТО

TAKEN BY: A.F. DRAWN BY: C.A.G REV. B.D.H. 11-01-11







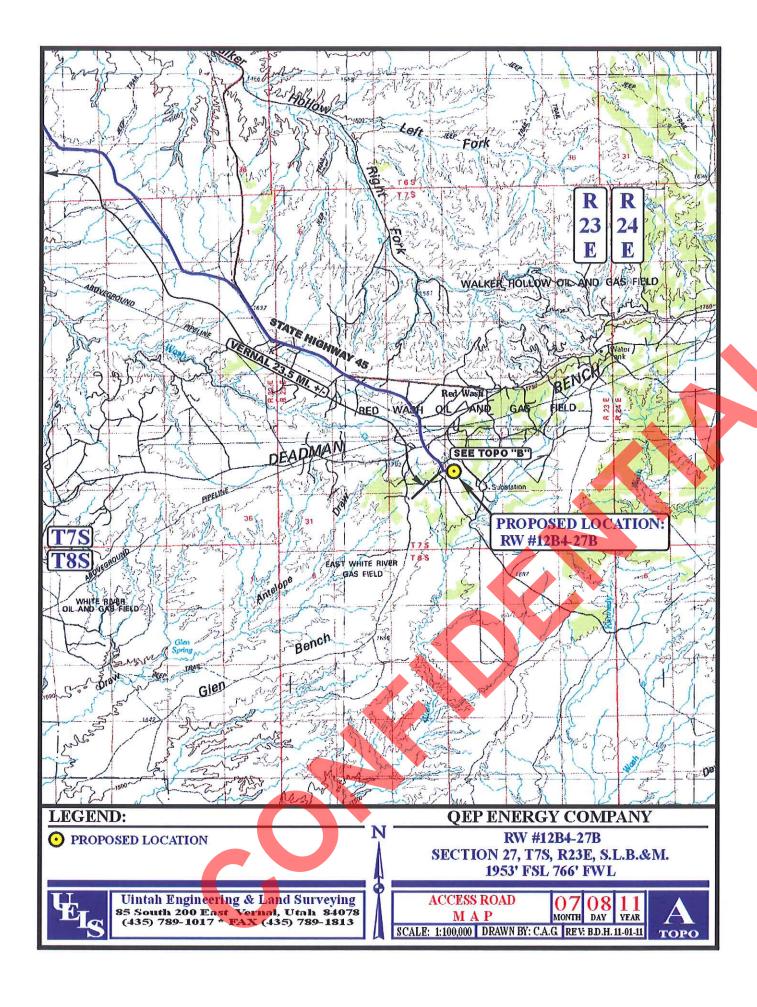


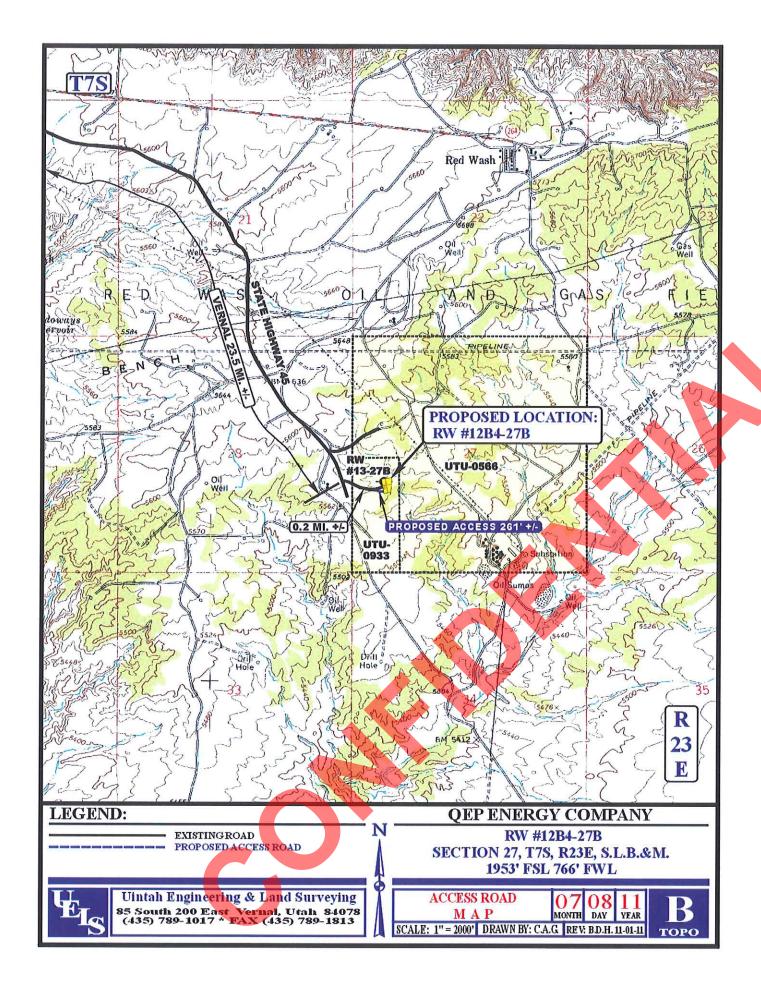
# QEP ENERGY COMPANY RW #12B4-27B SECTION 27, T7S, R23E, S.L.B.&M.

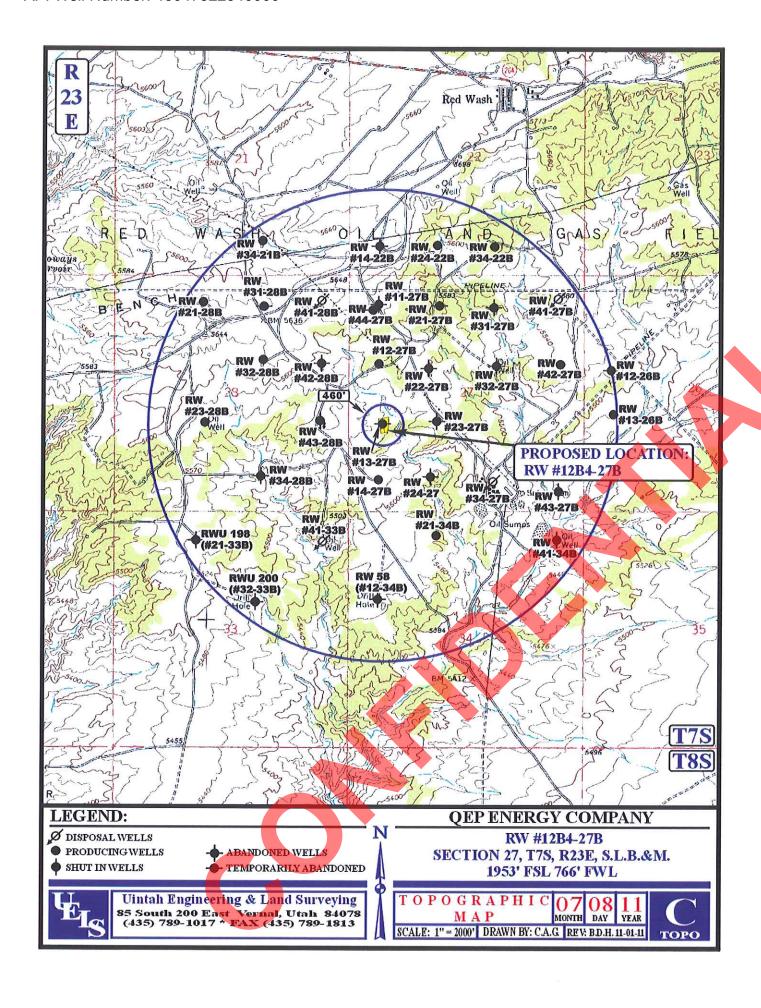
PROCEED IN AN EASTERLY, THEN SOUTHERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 3.9 MILES TO THE JUNCTION OF STATE HIGHWAY 45; EXIT RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 19.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY, THEN EASTERLY DIRECTION APPROXIMATELY 261' TO THE PROPOSED LOCATION.

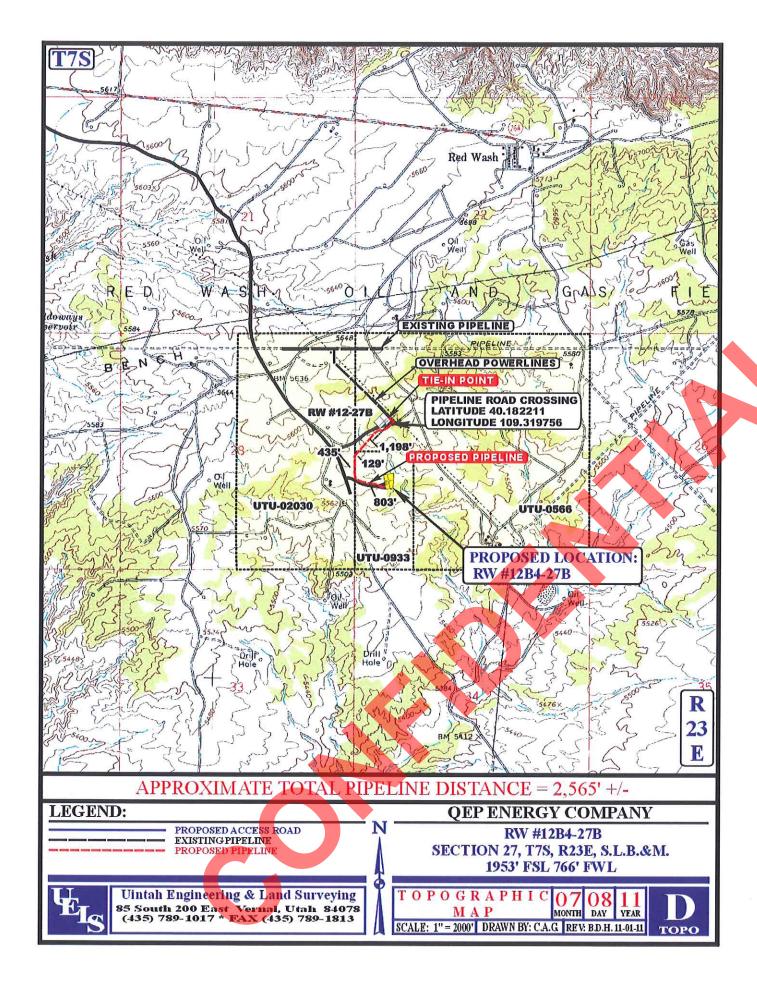
TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 23.7 MILES.











#### **Additional Operator Remarks**

QEP Energy Company proposes to drill a vertical gas well to a depth of 10, 955' to test the Mesa Verde Formation. This well is being twinned on well location 13-27B. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

Please see Onshore Order No. 1.

Please refer to QEP Energy Company Greater Deadman Bench EIS UT-080-2003-0369V Record of Decision dated March 31, 2008.

Please be advised that QEP Energy Company agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Bond No.ESB000024. The principal is QEP Energy Company via surety as consent as provided for the 43 CFR 3104.2.



QEP ENERGY COMPANY
RW 12B4-27B
1953' FSL 766' FWL
NWSW, SECTION 27, T7S, R23E
UINTAH COUNTY, UTAH
LEASE # UTU-0933

# ONSHORE ORDER NO. 1 MULTI – POINT SURFACE USE & OPERATIONS PLAN

# THIS WELL IS BEING TWINNED ON WELL LOCATION RW 13-27B.

An onsite inspection was conducted for the RW 12B4-27B on August 24, 2011. Weather conditions were rainy at the time of the onsite. In attendance at the inspection were the following individuals:

Kevin Sadlier

Aaron Roe

Holly Villa

Bureau of Land Management
Bureau of Land Management
Bureau of Land Management

Jan Nelson
Stephanie Tomkinson
Ryan Angus
Valyn Davis
Bob Haygood
QEP Energy Company

Andy Floyd Uintah Engineering & Land Surveying

#### 1. Existing Roads:

The proposed well site is approximately 24 miles South of Vernal, Utah.

Refer to Topo Maps A and B for location of access roads within a 2 - mile radius.

All existing roads will be maintained and kept in good repair during all phases of operation.

# 2. Planned Access Roads:

Please refer to QEP Energy Company Greater Deadman Bench EIS UTU-080-200-0369V Record of Decision dated March 31, 2008.

Refer to Topo Map B for the location of the proposed access road.

No new access road is proposed. The access to be used is the access to the existing RW 13-27B location. The road that access's the location will be re-routed to the south end of the pad to avoid the reserve pit. The access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet, 261' in length, containing .180 acres. Any additional disturbance required due to intersections or sharp curves will be discussed at the on-site and approved by the

BLM/VFO AO. Graveling or capping the roadbed will be performed as necessary to provide a well constructed safe road. Should conditions warrant, rock, gravel or culverts will be installed as needed. Surface disturbance and vehicular traffic will be limited to the approved location and access route or, as proposed by the Operator.

Access roads and surface disturbing activities will conform to standards outlined in the BLM and Forest Service publication: Surface Operating Standards for Oil and gas Exploration and Development, Fourth Edition 2006. The road surface and shoulders will be kept in a safe and usable condition and will be maintained in accordance with the original construction standards. All drainage ditches and culverts will be kept clear and free-flowing and will be maintained according to original construction standards. The access road disturbed area will be kept free of trash during operations. All traffic will be confined to the approved road running surface. Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause excess siltation or accumulation of debris in the drainage nor shall the drainage be blocked by the roadbed. If culverts are needed, the location and size of the culverts will be proposed during the on-site. The operator will clean and maintain approved culverts as needed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Should mud holes develop, the holes shall be filled in and detours around the holes avoided. When snow is removed from the road during the winter months, the snow should be pushed outside of the borrow ditches, and the turnouts kept clear so that snowmelt will be channeled away from the road.

Refer to Topo Map B for the location of the proposed access road.

# 3. <u>Location of Existing Wells Within a 1 – Mile Radius:</u> Please refer to Topo Map C.

# 4. Location of Existing & Proposed Facilities:

Please refer to QEP Energy Company Greater Deadman Bench EIS UTU-080-200-0369V Record of Decision dated March 31, 2008.

The following guidelines will apply if the well is productive.

A containment dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks). These dikes will be constructed of compacted impervious subsoil; hold 110% of the capacity of the largest tank; and, be independent of the back cut. If a Spill Prevention, Control, and Countermeasure (SPCC) Plan is required by the Environmental Protection Agency, the containment dike may be expanded to meet SPCC requirements with approval by the BLM/VFO AO. The specific APD will address additional capacity if such is needed due to environmental concerns. The use of topsoil for the construction of dikes will not be allowed.

All loading lines will be placed inside the berm surrounding the tank batteries.

All permanent (on site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a color approved by the State.

It was determined on the onsite by the BLM VFO AO that the facilities will be painted Covert Green.

Refer to Topo Map D for the location of the proposed pipeline.

All existing equipment will be moved off location before any construction begins.

The proposed surface pipeline will be constructed utilizing existing disturbed areas to minimize surface disturbance. No construction activities will be allowed outside of the proposed pipeline.

Prior to construction, the Permittee will develop a plan of installation to minimize surface disturbance. Pipe will be strung along the pipeline route with either a flatbed trailer and rubber tired backhoe or a tracked typed side boom. Where surface conditions do not allow the pipe to be strung using conventional methods, the Permittee will utilize pull sections to run the fabricated pipe through the area from central staging areas along the pipeline route.

Upon completion of stringing activities the Permittee will fabricate the pipeline on wooden skids adjacent to the centerline of the pipeline route using truck mounted welding machines. All fabricated piping will be lowered off of the wooden skids and placed along the centerline. Upon completion of all activities, the wooden skids will be removed from the pipeline route using a flatbed truck or flatbed truck and trailer.

When the surface terrain prohibits the Permittee from safely installing the pipeline along the pipeline route, grading of the route will be required. Prior to installing the pipeline in these areas a plan will be developed to safely install the pipeline while minimizing grading activities and surface disturbances. Additionally, erosion control Best Management Practices will be installed as needed prior to the start of any grading activities. Surface grading will be limited to what is needed to safely install the pipeline. Track type bulldozers and track type backhoes will be utilized for grading activities.

Upon completion of the pipeline installation, the pipeline route will be restored to the pre-disturbance surface contours.

The proposed pipeline will be a surface 10" or smaller, 2,565' in length, containing 1.767 acres.

# Road Crossings

Fusion Bond or concrete coated pipe will be used for all road crossings to alleviate future corrosion.

All pipe and fittings used for road crossings will be prefabricated within the proposed pipeline route to minimize the duration of open pipe trench across the

roadway. Pipe used for road crossings will be isolated on each end with a flange set and insulation kit and cathodically protected with a magnesium type anode. Adequately sized equipment will be used for minor and major road crossings. Depth of cover for minor roads will be >4' and the depth of cover for major roads will be >6'.

Prior to lowering the pipe in the trench, the Permittee will "Jeep" the pipe to locate and repair any Holidays in the pipe coating. Upon lowering the pipe in the trench, 6" of bedding and a minimum of 6" of shading will be installed to protect the pipe using either native soils <1" in diameter or imported sand. Pipe trenches that extend across gravel roads will be backfilled with native soils to within 8" of the driving surface and capped with 3/4" road base. Pipe trenches that extend across asphalt paved roads will be backfilled to 4" of the driving surface with 3/4" road base and capped asphalt material.

# 5. Location and Type of Water Supply:

Please refer to QEP Energy Company Greater Deadman Bench EIS UTU-080-200-0369V Record of Decision dated March 31, 2008.

Water for drilling purposes would be obtained from Wonsits Valley Water Right # A 36125 (which was filed on May 7, 1964) or Red Wash Water Right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System.

# 6. Source of Construction Materials:

Please refer to QEP Energy Company Greater Deadman Bench EIS UTU-080-200-0369V Record of Decision dated March 31, 2008.

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

The use of materials under BLM jurisdiction will conform with 43 CFR 3610.2-3.

# 7. Methods of Handling Waste Materials:

Please refer to QEP Energy Company Greater Deadman Bench EIS UTU-080-200-0369V Record of Decision dated March 31, 2008.

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids including salts and chemicals will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be used at the next drill site or will be removed and disposed of at an approved waste disposal facility within 6 months after drilling is terminated.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

Unless specified in the site specific APD, the reserve pit will be constructed on the location and will not be located within natural drainages, where a flood hazard exists or surface runoff will or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

It will be determined at the on-site inspection if a pit liner is necessary, the reserve pit will be lined with a synthetic reinforced liner, a minimum of 20 millimeters thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place.

No trash or scrap will be disposed of in the pit.

Reserve pit leaks are considered an undesirable event and will be orally reported to the AO.

After first production, produced wastewater will be confined to the approved pit or storage tank for a period not to exceed 90 days.

After the 90 day period, the produced water will be contained in tanks on location and then hauled by truck to one of the following pre-approved disposal sites:

Red Wash Disposal well located in the SESE, Section 28, T7S, R23E, West End Disposal located in the NESE, Section 28, T7S, R22E.

Produced water, oil, and other byproducts will not be applied to roads or well pads for the control of dust or weeds. The dumping of produced fluids on roads, well sites, or other areas will not be allowed.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site. The spills will be reported to the AO and other authorities as appropriate.

A chemical porta-toilet will be furnished with the drilling rig. The chemical porta-toilet wastes will be hauled to Ashley Valley Sewer and Water System for disposal.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. Trash will not be burned on location. All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig. All trash and waste material will be hauled to the Uintah County Landfill.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of wells. Furthermore, extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will not be used, produced, stored, transported, or

disposed of in association with the drilling, testing, or completing of wells within these areas. Specific APD's shall address any modifications from this policy.

## 8. Ancillary Facilities:

None anticipated.

# 9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram rig orientation, parking areas, and access roads, as well as the location of the following:

The reserve pit.

The stockpiled topsoil will not be used for facility berms. All brush removed from the well pad during construction will be stockpiled with topsoil.

The flare pit or flare box will be located downwind from the prevailing wind direction.

Any drainage that crosses the well location will be diverted around the location by using ditches, water diversion drains or berms. If deemed necessary at the on-site, erosion drains may be installed to contain sediments that could be produced from access roads and well locations.

A pit liner is required. A felt pit liner will be required if bedrock is encountered.

# 10. Fencing Requirements:

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched using a stretching device before it is attached to corner posts.

The reserve pit will be fenced on three (3) sides during drilling operations. The fourth side will be put in place when the rig moves off location. The pit will be fenced and maintained until it is backfilled. If drilling operations does not commence within 3 days, the fourth side of the fence will be installed

# 11. Plans for Reclamation of the Surface:

Please refer to QEP Energy Company Uinta Basin Division Reclamation Plan

# Site Specific Procedures:

# Site Specific Reclamation Summary:

Reclamation will follow Questar Exploration and Production Company, Uinta Basin Division's Reclamation Plan, September 2009 (Questar's Reclamation Plan) and the BLM Green River District Reclamation Guidelines.

All trash and debris will be removed from the disturbed area.

The disturbed area will be backfilled with subsoil.

Topsoil will be spread to an even, appropriate depth and disked if needed.

Water courses and drainages will be restored.

Erosion control devices will be installed where needed.

Seeding will be done in the fall, prior to ground freeze up.

Seed mix will be submitted to a BLM AO for approval prior to seeding.

Monitoring and reporting will be conducted as stated in Questar's Reclamation Plan. A reference site and weed data sheet has been established and are included in this application.

It was determined and agreed upon that there is 4" inches of top soil.

# 12. Surface Ownership:

Bureau of Land Management 170 South 500 East Vernal, Utah 84078 (435) 781-4400

# 13. Other Information:

This well is being twinned on well location RW 13-27B.

A Class III archaeological survey was conducted by Montgomery Archaeology Consultants. A copy of this report was submitted on August 15, 2011, **State of Utah Antiquities Project U-11-MQ-0617b** by Montgomery Archaeology Consultants. Cultural resource clearance was recommended for this location.

A Class III paleontological survey was conducted by Intermountain Paleo Consulting. A copy of this report was submitted on June 27, 2011 IPC # 11-93 by Stephen D. Sandau. The inspection resulted in the location of no fossil resources. However, if vertebrate fossil(s) are found during construction a paleontologist should be immediately notified. QEP will provide Paleo monitor if needed.



#### Lessee's or Operator's Representative & Certification:

Valyn Davis Regulatory Affairs Analyst QEP Energy Company 11002 East 17500 South Vernal, UT 84078 (435) 781-4331

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

QEP Energy Company is considered to be the operator of the subject well. QEP Energy Company agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

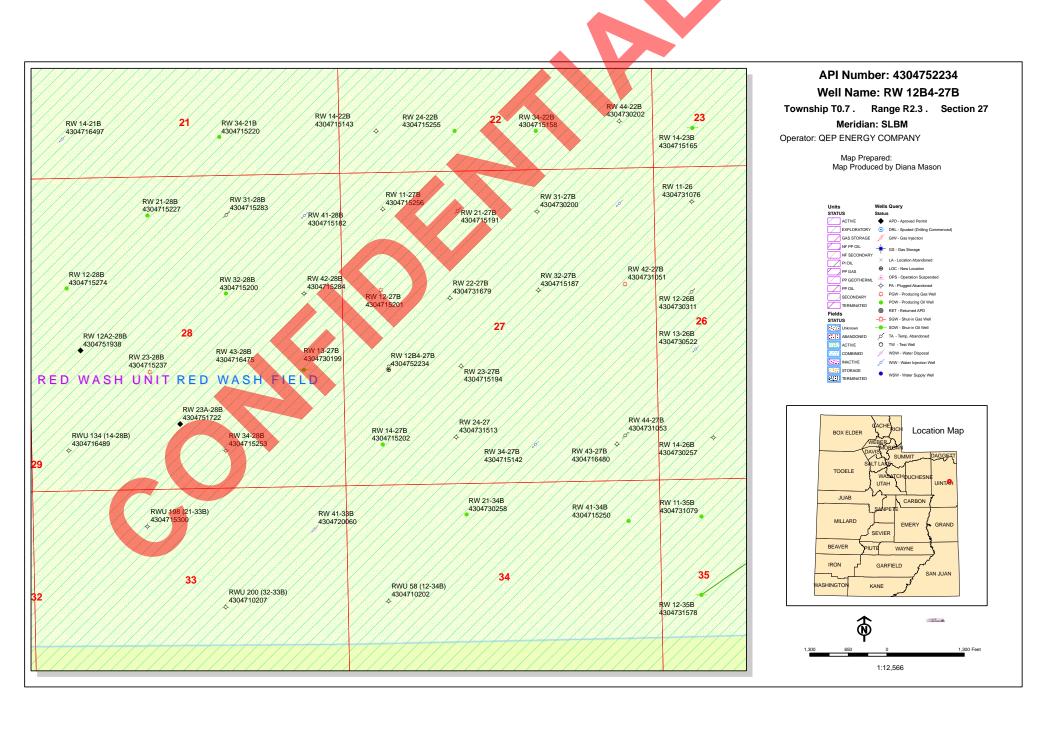
Bond coverage pursuant to 43 CFR 3104.2 for lease activities is being provided by Bond No. ESB000024

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operations; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Valyn Davis

12/7/2011

Date



# **United States Department of the Interior**

#### BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

December 9, 2011

#### Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2011 Plan of Development Red Wash Unit,

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2011 within the Red Wash Unit, Uintah County, Utah.

API# WELL NAME LOCATION

(Proposed PZ MESA VERDE)

Sec 18 T07S R23E 0687 FNL 1829 FWL 43-047-52231 RW 3B4-18B 43-047-52232 RW 6C1-19B Sec 19 T07S R23E 1867 FNL 1621 FWL Sec 25 T078 R22E 1856 FSL 2023 FWL 43-047-52233 RW 11B4-25A 43-047-52234 RW 12B4-27B Sec 27 T07S R23E 1953 FSL 0766 FWL 43-047-52235 RW 16B4-30B Sec 30 T07S R23E 0604 FSL 0518 FEL 43-047-52236 RW 8C1-19B Sec 19 T07S R23E 1987 FNL 0330 FEL 43-047-52237 RW 9C1-24B Sec 24 T07S R23E 1987 FSL 0691 FEL 43-047-52238 RW 9C1-26B Sec 26 T07S R23E 2008 FSL 0652 FEL

This office has no objection to permitting the wells at this time.

Michael L. Coulthard

Digitally signed by Michael L Coulthard

Dibt: cn-Michael L. Coulthard, cn-Bureau of Land Management, ou=Branch of Minerals, email-Michael\_Coulthard@blm.gov, c=US Date: 2011.12.09 11:14:08-0-700'

bcc: File - Red Wash Unit

Division of Oil Gas and Mining

Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:12-9-11

RECEIVED: December 09, 2011

#### WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 12/7/2011

WELL NAME: RW 12B4-27B

**OPERATOR:** QEP ENERGY COMPANY (N3700)

**CONTACT:** Jan Nelson

PROPOSED LOCATION: NWSW 27 070S 230E

**SURFACE: 1953 FSL 0766 FWL** 

**BOTTOM:** 1953 FSL 0766 FWL

**COUNTY: UINTAH** 

**LATITUDE: 40.17866** UTM SURF EASTINGS: 643040.00

FIELD NAME: RED WASH

**LEASE TYPE:** 1 - Federal

**LEASE NUMBER:** UTU-0933

SURFACE OWNER: 1 - Federal

API NO. ASSIGNED: 43047522340000

**PHONE NUMBER:** 435 781-4331

**Permit Tech Review:** 

**Engineering Review:** 

Geology Review:

**LONGITUDE:** -109.31993

NORTHINGS: 4448940.00

PROPOSED PRODUCING FORMATION(S): MESA VERDE

COALBED METHANE: NO

#### **RECEIVED AND/OR REVIEWED:**

PLAT

Bond: FEDERAL - ESB000024

**Potash** 

Oil Shale 190-5

**Oil Shale 190-3** 

Oil Shale 190-13

Water Permit: A36125 - 49-2153

RDCC Review:

**Fee Surface Agreement** 

Intent to Commingle

**Commingling Approved** 

LOCATION AND SITING:

R649-2-3.

Unit: RED WASH

R649-3-2. General

R649-3-3. Exception

**Drilling Unit** 

Board Cause No: Cause 187-07

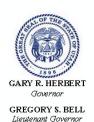
**Effective Date:** 9/18/2001

Siting: Suspends General Siting

R649-3-11. Directional Drill

Presite Completed **Comments:** 

Stipulations: 4 - Federal Approval - dmason API Well No: 43047522340000



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

### **Permit To Drill**

\*\*\*\*\*\*

Well Name: RW 12B4-27B API Well Number: 43047522340000

**Lease Number:** UTU-0933 **Surface Owner:** FEDERAL **Approval Date:** 12/12/2011

#### **Issued to:**

QEP ENERGY COMPANY, 11002 East 17500 South, Vernal, Ut 84078

#### **Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 187-07. The expected producing formation or pool is the MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

#### **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available) OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov

#### **Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month

API Well No: 43047522340000

- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas Form 3160-3 (August 2007)

# RECEIVED

**UNITED STATES** DEPARTMENT OF THE INTERIOR **DEC 08 2011** BUREAU OF LAND MANAGEMENT

OMB No. 1004-0136 Expires July 31, 2010

	APPLICAT	ION FOR PERM	IT TO DRILL OR REELER M
r:	☑ DRILL	☐ REENTER	CONFIDENTIA

Lease Serial No. UTU0933

FORM APPROVED

APPLICATION FOR PERMIT	TO DRILL OR REELDER M	6. If Indian, Allottee or Tribe Nam	ie	
1a. Type of Work: ☑ DRILL ☐ REENTER	CONFIDENTIAL	7. If Unit or CA Agreement, Name 892000761X	and No.	
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Oth	ner Single Zone 🔯 Multiple Zone	8. Lease Name and Well No. RW 12B4-27B		
	JAN NELSON on@qepres.com	9. API Well No. 43-047-52234	•	
3a. Address 11002 EAST 17500 SOUTH VERNAL, UT 84078	3b. Phone No. (include area code) Ph: 435-781-4331 Fx: 435-781-4395	10. Field and Pool, or Exploratory RED WASH		
4. Location of Well (Report location clearly and in accorda	nce with any State requirements.*)	11. Sec., T., R., M., or Blk. and Sur	rvey or Area	
At surface NWSW 1953FSL 766FWL	40.178667 N Lat, 109.319928 W Lon	Sec 27 T7S R23E Mer SL	В	
At proposed prod. zone NWSW 1953FSL 766FWL	40.178667 N Lat, 109.319928 W Lon			
14. Distance in miles and direction from nearest town or post 24 +/- SOUTHEAST OF VERNAL, UT	office*	12. County or Parish UINTA	13. State UT	
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of Acres in Lease	17. Spacing Unit dedicated to this well		
766	560.00	40.00		
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on file		
1200 +/-	10955 MD	ESB000024		
21. Elevations (Show whether DF, KB, RT, GL, etc. 5542 GL	22. Approximate date work will start 04/01/2012	23. Estimated duration 30 DAYS		
	24. Attachments			

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- 1. Well plat certified by a registered surveyor.
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see
- Operator certification
- 6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) JAN NELSON Ph: 435-781-4331	Date 12/07/2011
Title PERMIT AGENT		
Approved by (Signature)	Name (Printed/Typed) Jerry Kenczka	MAR 2 7 2012
Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Electronic Submission #125046 verified by the BLM Well Information System For QEP ENERGY COMPANY, sent to the Vernal

NOTICE OF APPROVAL

RECEIVED

APR 0 4 2012

DIV. OF OIL, GAS & MINING

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

12 UBFO162AE

MPN Posted 12/12/20



# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE

VERNAL, UT 84078

(435) 781-4400



# CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No:

**QEP Energy Company** 

170 South 500 East

Well No: RW 12B4-27B API No: 43-047-52234 Location: Lease No: NWSW, Sec. 27, T7S, R23E

UTU-0933

Agreement:

Red Wash Unit

**OFFICE NUMBER:** 

(435) 781-4400

**OFFICE FAX NUMBER:** 

(435) 781-3420

# A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

## NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	_	Twenty-Four (24) hours prior to running casing and cementing all casing strings to:  blm_ut_vn_opreport@blm.gov
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 8 Well: RW 12B4-27B 3/27/2012

# SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were brought in from areas outside the Uinta Basin, to prevent weed seed introduction.
- All disturbance areas shall be monitored for noxious weeds annually, for a minimum of three growing seasons following completion of project or until desirable vegetation is established.
- Reclamation will be completed in accordance with the QEP Energy company and Production Company, Uintah Basin Division's Reclamation Plan on file with the Vernal Field Office of the BLM.
- In the event historic or archaeological resources are uncovered during construction, work will stop immediately and the appropriate BLM AO will be notified.
- Due to the number of fossils found during the surveys at well sites, RW 3B4-18B, RW 6C1-19B, and RW 8C1-30B, it is recommended that a permitted paleontologist be present to monitor the construction processes at these locations. QEP has agreed to provide a permitted paleontologist to monitor these areas. No paleontological restrictions are required for the other well locations associated with this project. Table 4-3 shows which wells and associated roads and pipelines will require a monitor.

Table 4-3

I UDIO T O				_
Well Name	Well Pad	Access Road	Pipeline	
RW 3B4-18B	Yes	Yes	Yes	
RW 8C1-19B	No	No	No	
RW 6C1-19B	Yes	Yes	Yes	
RW 6B4-21B	No	No	No	
RW 5D2-26B	No	No	No	
RW 12B4-27B	No	No	No	
RW 8C1-30B	No	No	No	
RW 16B4-30B	Yes	Yes	Yes	

Yes, indicates a permitted paleontologist will be present to monitor the construction process.

 If paleontologic resources are uncovered during construction activities, the operator shall immediately suspend all operations that will further disturb such resources, and immediately notify the Authorized Officer (AO). The AO will arrange for a determination of significance and, if necessary, recommend a recovery or avoidance plan.

QEP has agreed not to construct or drill during the following dates, unless otherwise determined by the BLM Authorized Officer.

Table 2-2 Raptor nesting timing restriction

Well Name	Burrowing Owl March 1 to August 31	Red Tailed Hawk March 1 to August 15	Ferruginous Hawk March 1 to August 1		
RW 3B4-18B	No	No	No		
RW 8C1-19B	No	No	No		
RW 6C1-19B	No	No	No		
RW 6B4-21B	Yes	No	Yes		
RW 5D2-26B	No	No	No		
RW 12B4-27B	No	No	No		
RW 8C1-30B	No	Yes	No		
RW 16B4-30B	No	No	No		

Yes indicates QEP will not drill or construct during this time period.

- All internal combustion equipment will be kept in good working order.
- Open burning of garbage or refuse will not occur at well sites or other facilities.
- Drill rigs will be equipped with Tier II or better diesel engines.
- Low bleed pneumatics will be installed on separator dump valves and other controllers. The use of low bleed pneumatics will result in a lower emission of VOCs.
- During completion, flaring will be limited as much as possible. Production equipment and gathering lines will be installed as soon as possible.
- Well site telemetry will be utilized as feasible for production operations.
- Following well plugging and abandonment, the location, access roads, pipelines, and other facilities shall be reclaimed. All disturbed surfaces shall be reshaped to approximate the original contour; the top soil respread over the surface; and, the surface revegetated. The surface of approved staging areas where construction activities did not occur may require disking or ripping and reseeding.
- The best method to avoid entrainment is to pump from an off-channel location one that does not connect to the river during high spring flows. An infiltration gallery constructed in a BLM and Service approved location is best.
- If the pump head is located in the river channel where larval fish are known to occur, the following measures apply:
  - o do not situate the pump in a low-flow or no-flow area as these habitats tend to concentrate larval fishes:
  - o limit the amount of pumping, to the greatest extent possible, during that period of the year when larval fish may be present (April 1 to August 31); and
  - o limit the amount of pumping, to the greatest extent possible, during the pre-dawn hours as larval drift studies indicate that this is a period of greatest daily activity.
- Screen all pump intakes with 3/32" mesh material.

Page 4 of 8 Well: RW 12B4-27B 3/27/2012

- Approach velocities for intake structures will follow the National Marine Fisheries Service's
  document "Fish Screening Criteria for Anadromous Salmonids". For projects with an in-stream
  intake that operate in stream reaches where larval fish may be present, the approach velocity will
  not exceed 0.33 feet per second (ft/s).
- Report any fish impinged on the intake screen to the Service (801.975.3330) and the Utah Division of Wildlife Resources:

Northeastern Region 152 East 100 North, Vernal, UT 84078 Phone: (435) 781-9453

Page 5 of 8 Well: RW 12B4-27B 3/27/2012

# DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

## SITE SPECIFIC DOWNHOLE COAs:

- Gamma ray log shall be run from Total Depth to Surface.
- CBL will be run from TD to TOC.

## Variances Granted:

- Air Drilling
  - Properly lubricated and maintained rotating head. Variance granted to use a properly maintained and lubricated diverter bowl in place of a rotating head
  - Blooie line discharge 100' from the well bore. Variance granted for blooie line discharge to be 50' to 70' from the well bore.
  - Compressors located in the opposite direction from the blooie line a minimum of 100' from the well bore. Variance granted for truck/trailer mounted air compressors located 50' form the well bore.
  - In lieu of mud productions on location, operator will fill a 400 bbl tank with water for the kill medium.
  - Automatic igniter. Variance granted for igniter, a diffuser will be used instead. Operator will
    mount a deflector at the end of the blooie line to change direction and reduce the velocity of
    the cuttings flow to the reserve pit.
  - o Flare pit. Variance granted, there is no need of a flare during the drilling of the surface hole.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

# DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's log.

Page 6 of 8 Well: RW 12B4-27B 3/27/2012

- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to BLM\_UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 7 of 8 Well: RW 12B4-27B

3/27/2012

## **OPERATING REQUIREMENT REMINDERS:**

 All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at <a href="https://www.ONRR.gov">www.ONRR.gov</a>.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
  notified when it is placed in a producing status. Such notification will be by written communication
  and must be received in this office by not later than the fifth business day following the date on
  which the well is placed on production. The notification shall provide, as a minimum, the following
  informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

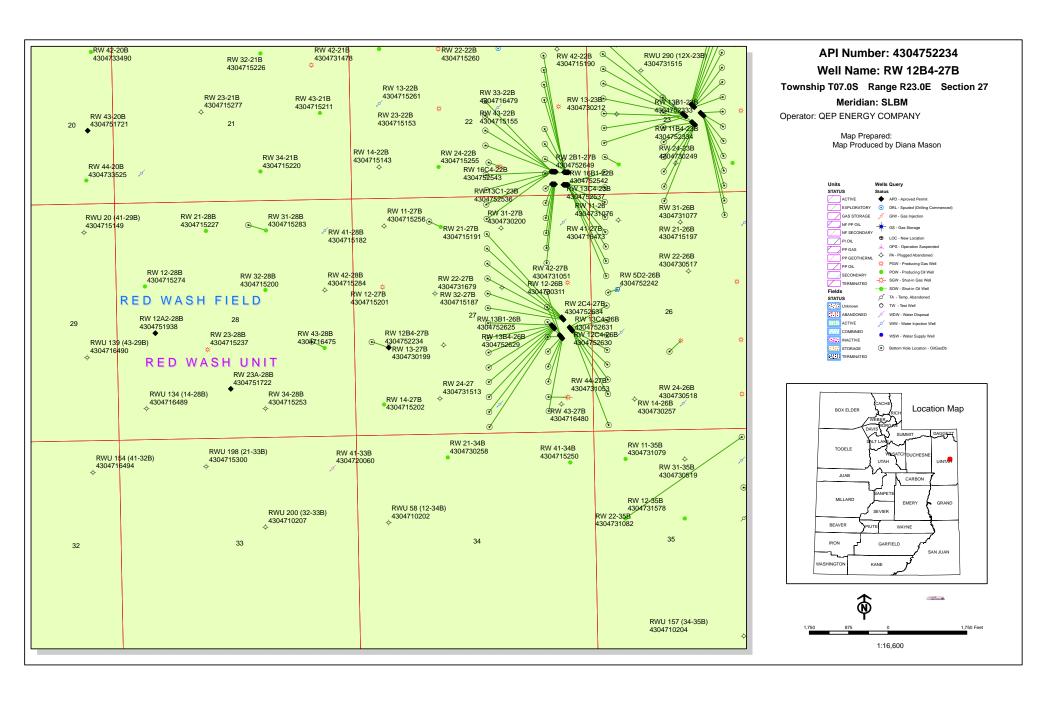
Page 8 of 8 Well: RW 12B4-27B 3/27/2012

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office
  Petroleum Engineers will be provided with a date and time for the initial meter calibration and all
  future meter proving schedules. A copy of the meter calibration reports shall be submitted to the
  BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid
  hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall
  be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to
  the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first.
  All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All
  product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in
  accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior approval
  of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
  approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
  of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

Sundry Number: 27254 API Well Number: 43047522340000 FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

	STATE OF UTAH		FORM 9							
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MININ		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0933							
SUNDF	RY NOTICES AND REPORTS ON	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:							
	oposals to drill new wells, significantly dee reenter plugged wells, or to drill horizonta n for such proposals.		7.UNIT or CA AGREEMENT NAME: RED WASH							
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: RW 12B4-27B							
2. NAME OF OPERATOR: QEP ENERGY COMPANY			<b>9. API NUMBER:</b> 43047522340000							
3. ADDRESS OF OPERATOR: 11002 East 17500 South,		HONE NUMBER: 08-3068 Ext	9. FIELD and POOL or WILDCAT: RED WASH							
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1953 FSL 0766 FWL			COUNTY: UINTAH							
QTR/QTR, SECTION, TOWNS	HIP, RANGE, MERIDIAN: 27 Township: 07.0S Range: 23.0E Meridia	n: S	STATE: UTAH							
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA							
TYPE OF SUBMISSION TYPE OF ACTION										
QEP ENERGY COM SPACING OF THE ME	CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR  WATER SHUTOFF  WILDCAT WELL DETERMINATION  COMPLETED OPERATIONS. Clearly show all properties of the property of the properties of the pr	E THE BOTTOM HOLE REFORE, QEP ENERGY	CASING REPAIR  CHANGE WELL NAME  CONVERT WELL TYPE  NEW CONSTRUCTION  PLUG BACK  RECOMPLETE DIFFERENT FORMATION  TEMPORARY ABANDON  WATER DISPOSAL  APD EXTENSION  OTHER:  Depths, volumes, etc.  Approved by the Utah Division of Oil, Gas and Mining  Date: July 11, 2012  By:							
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE								
Valyn Davis  SIGNATURE	435 781-4369	Regulatory Affairs Analyst  DATE								
N/A		7/2/2012								





11002 East 17500 South Vernal, UT 84078 Telephone 435-781-4369 Fax 435-781-4395

July 2, 2012

Ms. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

RE: Directional Drilling R649-3-11

Red Wash Unit RW 12B4-27B

1953' FSL 766' FWL, NWSW, Section 27, T7S, R23E (Surface) 2088' FSL 392' FWL, NWSW, Section 27, T7S, R23E (Bottom Hole) Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of QEP Energy Company Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649 -3-11 pertaining to the location and drilling of a directional well.

QEP Energy Company would like to optimize the bottom hole spacing of the Mesa Verde development; therefore, QEP Energy Company would like to drill this well directionally.

Furthermore, QEP Energy Company certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information QEP Energy Company requests the permit be granted pursuant to Rule R649-3-11.

Sincerely,

QEP Energy Company

Valyn Davis

Regulatory Affairs Analyst



# **QEP ENERGY (UT)**

Red Wash RW 13-27B (RW 12B4-27B) Pad RW 12B4-27B

**Original Hole** 

Plan: Plan ver.1

# **Standard Planning Report**

29 May, 2012





## QEP Resources, Inc.

## Planning Report



Database: Company: EDMDB QEP QEP ENERGY (UT)

Red Wash Project:

Site:

RW 13-27B (RW 12B4-27B) Pad

Well: Wellbore: Design:

RW 12B4-27B Original Hole Plan ver.1

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Well RW 12B4-27B

RKB @ 5557.10usft (FRONTIER 2) RKB @ 5557.10usft (FRONTIER 2)

Minimum Curvature

**Project** 

Site

Red Wash

Map System:

US State Plane 1983 North American Datum 1983

Geo Datum: Map Zone:

Utah Central Zone

System Datum:

Mean Sea Level

Using geodetic scale factor

RW 13-27B (RW 12B4-27B) Pad

Site Position:

Lat/Long

Northing: Easting:

7,241,256.737 usft

Latitude: 2.249,480,280 usft

Longitude:

40.178747

From: Position Uncertainty:

0.00 usft

Slot Radius:

13-3/16 "

Grid Convergence:

-109.319947

1.40°

Well

RW 12B4-27B

Well Position

+N/-S +E/-W -29.35 usft 5.43 usft Northing: Easting:

7,241,227.526 usft 2,249,486.427 usft Latitude: Longitude:

40,178667 -109.319928

Position Uncertainty

0.00 usft

Wellhead Elevation:

5,541.10 usft

Ground Level:

66.03

5,541.10 usft

Wellbore

Original Hole

Magnetics

**Model Name** 

Plan ver.1

Sample Date IGRF2010 5/10/2012 Declination (°)

Dip Angle (°)

Field Strength

52,356

Design

Audit Notes:

Version:

Phase:

PLAN

10,91

Tie On Depth: +E/-W

0.00

Vertical Section:

Depth From (TVD) (usft) 0,00

+N/-S (usft) 0,00

(usft) 0.00

Direction (°) 289.65

Plan Sections Vertical Build Measured Dogleg Turn Depth Inclination Azimuth Depth +N/-S +E/-W Rate Rate Rate TFO (usft) (usft) (°/100usft) (°/100usft) (usft) (usft) (°/100usft) (°) (°) (°) **Target** 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2,000.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2,000.00 0.00 2,809.12 16.18 295.37 2,798.41 48.64 -102,56 2.00 2,00 0.00 295,37 3,784.83 295.37 16.18 3,735.46 165.15 -348.26 0.00 0.00 0.00 0.00 4,863.66 0.00 4,800.00 230.00 -485.00 0.00 180,00 0.00 1.50 -1.50 8,520,66 0.00 0.00 8,457.00 230.00 -485.00 0,00 0.00 0.00 0.00 1.50 8,753,99 3.50 131.00 8,690.19 225.33 -479.62 1.50 0.00 131,00 11,045,08 3.50 10,977.00 133.56 -374.06 0.00 131.00 0.00 0.00 0.00



# QEP Resources, Inc.

## Planning Report



Database: Company: Project:

Site:

EDMDB\_QEP QEP ENERGY (UT)

: Red Wash RW 13-27B (RW 12B4-27B) Pad

Well: RW 12B4-27B
Wellbore: Original Hole
Design: Plan ver.1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well RW 12B4-27B

RKB @ 5557.10usft (FRONTIER 2) RKB @ 5557.10usft (FRONTIER 2)

True

Minimum Curvature

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,809.12	16.18	295,37	2,798.41	48.64	-102,56	112.94	2,00	2.00	0.00
3,784.83	16.18	295,37	3,735.46	165.15	-348.26	383.51	0.00	0.00	0.00
4,863,66	0.00	0.00	4,800.00	230.00	-485.00	534.10	1.50	-1.50	0.00
8,520.66	0.00	0.00	8,457.00	230.00	-485.00	534.10	0.00	0.00	0.00
8,753.99	3.50	131.00	8,690,19	225.33	-479.62	527.46	1.50	1.50	0.00
11,045.08	3.50	131.00	10,977.00	133,56	-374.06	397.19	0.00	0.00	0.00

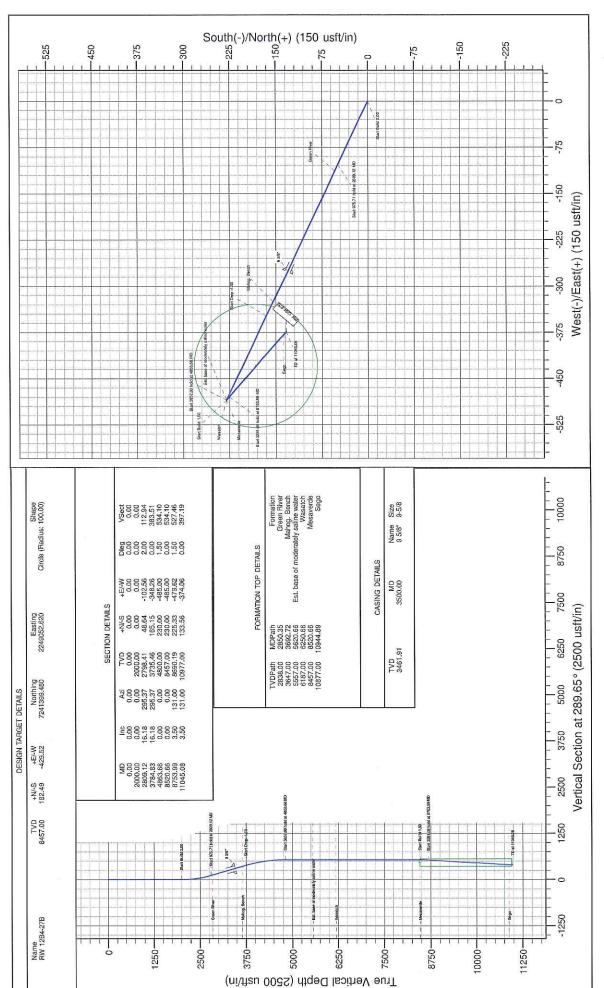
Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir.	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
RW 12B4-27B - plan misses targe - Circle (radius 100		0,00 7usft at 852	8,457.00 2,89usft MD	182.49 (8459.23 TVE	-429.52 ), 230.00 N,	7,241,399.480 485.00 E)	2,249,052.620	40,179168	-109,321468

Casing Points						
	Measured	Vertical			Casing	Hole
	Depth	Depth			Diameter	Diameter
	(usft)	(usft)		Name	(")	(")
	3,500.00	3,461,91	9 5/8"		9-5/8	12-1/4

Formations							
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	2,850.35	2,838.00	Green River		0.00		
	3,692.72	3,647.00	Mahog. Bench		0.00		
	5,620.66	5,557.00	Est. base of moderately saline water		0.00		
	6,250.66	6,187.00	Wasatch		0.00		
	8,520.66	8,457.00	Mesaverde		0.00		
	10,944.89	10,877.00	Sego		0.00		

A Magnific Rad Wash 13-278 (AWY 1284-278) Pad Magnific Rad Wall: RWY 1284-278) Pad Magnific Rad Wall: Wall: RWY 1284-278) Pad Magnific Rad Wall: RWY 1284-278) Pad Magnific Rad Wall: RWY 1284-278) Pad Magnific Rad Wash 1284-278) Pad Magnific Rad Wash 1284-278) Pad Wash 1284-278) Pad Wash 1284-2785

# **ENERGY (UT)** QEP Company Name:





	STATE OF UTAH		FORM 9
ι	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MI		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0933
SUNDR	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for pro current bottom-hole depth, I FOR PERMIT TO DRILL form	7.UNIT or CA AGREEMENT NAME: RED WASH		
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: RW 12B4-27B
2. NAME OF OPERATOR: QEP ENERGY COMPANY			9. API NUMBER: 43047522340000
3. ADDRESS OF OPERATOR: 11002 East 17500 South ,	Vernal, Ut, 84078 30	PHONE NUMBER: 03 308-3068 Ext	9. FIELD and POOL or WILDCAT: RED WASH
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1953 FSL 0766 FWL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	<b>HIP, RANGE, MERIDIAN:</b> 27 Township: 07.0S Range: 23.0E Me	eridian: S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
Approximate date work will start:	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
24.0 5. 110.1. 50.1	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
,	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:			
7/23/2012	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	LI TEMPORARY ABANDON
DRILLING REPORT	L TUBING REPAIR	☐ VENT OR FLARE ☐	WATER DISPOSAL
Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
	WILDCAT WELL DETERMINATION	OTHER	OTHER:
ON JULY 23, 2012, Q	COMPLETED OPERATIONS. Clearly show EP ENERGY COMPANY SET E AND CEMENTED IT WITH R	Γ 90' OF 14" CONDUCTOR	
NAME (PLEASE PRINT) Valyn Davis	<b>PHONE NUM</b> 435 781-4369	BER TITLE Regulatory Affairs Analyst	
SIGNATURE N/A		<b>DATE</b> 7/24/2012	

RECEIVED: Jul. 24, 2012

# Sundry Number: 27886 API Well Number: 43047522340000 FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

STATE OF UTAH		FORM 9	
ı	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MINII		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0933
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
Do not use this form for pro current bottom-hole depth, FOR PERMIT TO DRILL form	7.UNIT or CA AGREEMENT NAME: RED WASH		
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: RW 12B4-27B
2. NAME OF OPERATOR: QEP ENERGY COMPANY			9. API NUMBER: 43047522340000
3. ADDRESS OF OPERATOR: 11002 East 17500 South ,		PHONE NUMBER: 808-3068 Ext	9. FIELD and POOL or WILDCAT: RED WASH
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1953 FSL 0766 FWL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NWSW Section:	HIP, RANGE, MERIDIAN: 27 Township: 07.0S Range: 23.0E Meridi	an: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
QEP ENERGY COMI ON THE RW 12B4-27 HOLE, RUN 7 5/8" APPROVAL FOR TH	CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR  WATER SHUTOFF  WILDCAT WELL DETERMINATION  COMPLETED OPERATIONS. Clearly show all PANY REQUESTS TO CHANGE TO CHANGE TO CHANGE TO CHANGE TO CHANGE WILL BE AS INC. 26.4#/FT N-80 LTC CASING TO IS ACTION WAS RECEIVED FROM SLIM ON 07/18/2012 AT 1800	THE SURFACE CASING FOLLOWS: DRILL 9 7/8" O 3,695' MD. VERBAL OM ROBIN HANSEN AT	CASING REPAIR  CHANGE WELL NAME  CONVERT WELL TYPE  NEW CONSTRUCTION  PLUG BACK  RECOMPLETE DIFFERENT FORMATION  TEMPORARY ABANDON  WATER DISPOSAL  APD EXTENSION  OTHER:  DEPths, volumes, etc.  Accepted by the Utah Division of Oil, Gas and Mining  Date: August 08, 2012  By:
NAME (DI FACE POINT)	BUANE MUNDE	D TITLE	
Valyn Davis	<b>PHONE NUMBE</b> 435 781-4369	Regulatory Affairs Analyst	
SIGNATURE N/A		<b>DATE</b> 7/19/2012	

CONFIDENTIAL

# BLM - Vernal Field Office - Notification Form

Ope	rator <u>QEP ENERGY</u> Rig Name/	# FRONTIER #	2
•	mitted By JIMMY KITTRELL		Phone
Num	nber <u>435-828-0315 / 970-812</u>	-0587	
Well	Name/Number RW 12B4-27B		
Qtr/	Qtr <u>NW/SW</u> Section <u>27</u> Townsh	nip <u>7S</u> Range 23	E
Leas	se Serial Number <u>UTU 0933</u>		<del></del>
API	Number43-047-52234		
	<u>d Notice</u> – Spud is the initial sp below a casing string.	udding of the w	ell, not drilling
PM [	Date/Time <u>8/9/2012</u>	06:00	AM 🔀
<u>Casi</u> time	ng – Please report time casing s.	run starts, not	cementing
	Surface Casing		DEOCUED
	Intermediate Casing		RECEIVED
	Production Casing		AUG 08 2012
	Liner Other	I	DIV. OF OIL, GAS & MINING
	Date/Time	_ AM	
ВОР	E		
	Initial BOPE test at surface ca	sing point	
	BOPE test at intermediate cas	ing point	
	30 day BOPE test Other		
	Date/Time AM	PM	

# Remarks <u>WE WILL BE DRILLING SURFACE HOLE 8/9/2012</u> <u>WILL CALL IF ANY DELAYED</u>

# BLM - Vernal Field Office - Notification Form

Operator <u>QEP</u> Rig Name/# <u>FRONTIER 2</u>	
By <u>JIMMY KITTRELL</u> Phone Number <u>43</u> !	<u>5-828-0315</u>
Well Name/Number <u>RW 12B4-27B</u> Qtr/Qtr <u>NW/SW</u> Section <u>27</u> Township <u>7</u> Lease Serial Number <u>UTU 0933</u> API Number _43-047-52234 Spud Notice — Spud is the initial spudding of the out below a casing string.	
Date/Time AM	PM
Casing – Please report time casing run starts, no times.  Surface Casing Intermediate Casing Production Casing Liner Other	t cementing
Date/Time <u>8/11/2012 18:00HRS.</u> PM ⊠	AM [
Initial BOPE test at surface casing point BOPE test at intermediate casing point 30 day BOPE test Other	RECEIVED  AUG 1 4 2012  DIV. OF OIL, GAS & MINING
Date/Time AM _ PM _	

Remarks <u>IF NO TROUBLE WITH LOST CIRC, THESE TIMES WILL</u>
<u>BE CLOSE. RUNNING SURFACE CASING & CEMENT TO RW 12B4-</u>
<u>27B API # 43-047-52234 8/11/2012 @ 18:00 HRS.</u>

# BLM - Vernal Field Office - Notification Form

Operator <u>QEP</u> Rig Name/# <u>FRONTIER 2</u> Submitted	
By JIMMY KITTRELL Phone Number 435-828-0315	
Well Name/Number <u>RW 12B4-27B</u> Qtr/Qtr <u>NW/SW</u> Section <u>27</u> Township <u>7 S</u> Range 23 E_  Lease Serial Number <u>UTU 0933</u> API Number _43-047-52234  Spud Notice – Spud is the initial spudding of the well, not drilling	
out below a casing string.	
Date/Time AM	
Casing – Please report time casing run starts, not cementing imes.  Surface Casing Intermediate Casing Production Casing Liner Other	
Date/Time AM DM PM D	
Initial BOPE test at surface casing point  BOPE test at intermediate casing point  Other  AUG 1 4 20  AUG 1 4 20  DIV. OF OIL, GAS & N	12
Date/Time <u>08:00</u> <u>8/13/2012</u> AM $\boxtimes$ PM $\square$	

Remarks <u>IF NO TROUBLE WITH LOST CIRC, RUNNING CASING & CEMENT THESE TIMES WILL BE CLOSE. TEST BOP TO RW 12B4-27B API # 43-047-52234 8/13/2012 @ 08:00 HRS.</u>

## STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM							
Operator:	QEP ENERGY COMPANY		Operator Account Number: N 3700				
Address:	11002 EAST 17500 SOUTH						
	city VERNAL						
	state UT	zip 84078	Phone Number: (435) 781-4369				

API Number	Well I	Name	QQ	Sec	Twp	Rng	County
4304752234	RW 12B4-27B		NWSW	27	7S	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		te	Entity Assignment Effective Date	
С	99999	18478	7/23/2012		8120 12012		

API Number Well Name			QQ	QQ Sec Twp			Rng County		
Action Code	Current Entity Number	New Entity Number		l Spud Da			Lity Assignment Effective Date		
Comments:							<del></del>		

Well 3

API Number	Well t	Name	QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	* * * * <b>S</b>	pud Da	te		ity Assignment iffective Date
comments:				<del></del>		<u> </u>	

## **ACTION CODES:**

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entity
  E Other (Explain in 'comments' section)
  RECEIVED

Valyn	Davis
-------	-------

Name (Flease Print)

Signature Regulatory Affairs Analyst

8/2/2012 Date

# CONFIDENTIAL

# **BLM - Vernal Field Office - Notification Form**

Operator <u>QEP</u> Rig Name/# <u>FRONTIER 2</u> By <u>MURRAY BECKER</u> Phone Number <u>43</u>	
Well Name/Number <u>RW 12B4-27B</u> Qtr/Qtr <u>NW/SW</u> Section <u>27</u> Township <u>7</u> Lease Serial Number <u>UTU 0933</u> API Number _43-047-52234  Spud Notice — Spud is the initial spudding of the	<u>'S</u> Range 23 E_
out below a casing string.	
Date/Time AM	□ <b>PM</b> □
Casing — Please report time casing run starts, not times.  ☐ Surface Casing ☐ Intermediate Casing ☑ Production Casing ☐ Liner ☐ Other	ot cementing
Date/Time <u>9/4/2012 06:00HRS.</u> □	X AM □ PM
BOPE Initial BOPE test at surface casing point BOPE test at intermediate casing point 30 day BOPE test Other	RECEIVED SEP 0 4 2012 DIV. OF OIL, GAS & MINING
Date/Time AM □ PM □	

Remarks <u>IF NO TROUBLE WITH LOST CIRC, THESE TIMES WILL</u>
<u>BE CLOSE. RUNNING 4.5" CASING & CEMENT TO RW 12B4-27B</u>
<u>API # 43-047-52234 09/04/2012 @ 06:00 HRS.</u>

**Sundry Number: 30135 API Well Number: 43047522340000** 

	STATE OF UTAH		FORM 9		
ı	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>3</b>	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0933		
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
	posals to drill new wells, significantly deep reenter plugged wells, or to drill horizontal I n for such proposals.		7.UNIT or CA AGREEMENT NAME: RED WASH		
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: RW 12B4-27B		
2. NAME OF OPERATOR: QEP ENERGY COMPANY			<b>9. API NUMBER:</b> 43047522340000		
3. ADDRESS OF OPERATOR: 11002 East 17500 South ,		NE NUMBER: -3068 Ext	9. FIELD and POOL or WILDCAT: RED WASH		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1953 FSL 0766 FWL			COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NWSW Section:	HP, RANGE, MERIDIAN: 27 Township: 07.0S Range: 23.0E Meridian:	S	STATE: UTAH		
11. CHECI	K APPROPRIATE BOXES TO INDICATE NA	ATURE OF NOTICE, REPOR	T, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
	ACIDIZE A	ALTER CASING	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	RACTURE TREAT	NEW CONSTRUCTION		
9/22/2012	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
SPUD REPORT	✓ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON		
_	TUBING REPAIR	/ENT OR FLARE	WATER DISPOSAL		
DRILLING REPORT Report Date:	☐ WATER SHUTOFF ☐ S	SI TA STATUS EXTENSION	APD EXTENSION		
	WILDCAT WELL DETERMINATION	DTHER	OTHER:		
12 DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show all pe		enths volumes etc		
l .	NCED PRODUCTION ON SEPTEM p.m.		Accepted by the Utah Division of Oil, Gas and Mining		
			FOR RECORD ONLY September 25, 2012		
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE			
Valyn Davis	435 781-4369	Regulatory Affairs Analyst			
SIGNATURE N/A		<b>DATE</b> 9/24/2012			

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES

(highlight changes)

FORM 8

		D	IVISI	ON O	F OIL,	GAS.	AND N	MININ	G			5	LEASE			SERIAL NUMBER:	
WEL	L CON	/IPLET	ION	OR F	RECC	MPL	ETIC	N R	EPOR	TANE	LOG	6	. IF INDIA	N, ALLO	OTTEE OR T	RIBE NAME	
1a. TYPE OF WELL	:	OII WE	L C	] ,	GAS WELL		DRY		OTHE	R .		7		CA AGE	REEMENT N	AME	
b. TYPE OF WORK		_ DE	ED -		e –	_	DIEE .					8	WELL N	AME an	d NUMBER;		
NEW WELL 2. NAME OF OPERA	HORIZ. LATS.	_ EN	EP-	] ;	RE- ENTRY		DIFF. RESVR.		OTHE	R					I-27B		
QEP ENE		OMPAN	Υ									9	API NUI 4 <b>30</b> 4	ивек: <b>1752</b> 2	234		
3. ADDRESS OF OF 11002 E. 17			VE	RNAL		OTATE	UT	8/10	778		NUMBER: 5) 781-43			ND POO	OL, OR WILE	CAT	_
4. LOCATION OF W			IT VL	INVAL		SIAIE	01	ZIPOTO	370	(40	3) 101-40					NSHIP, RANGE,	
AT SURFACE:	NWSW	/, 1953' l	FSL,	766' F	WL							i i			7 7S	23E	
AT TOP PRODU	CING INTER	RVAL REPOR	TED BEI	LOW: N	wsw	, 2177	7' FSL,	, 311'	FWL				******	v 2	, ,	201.	
AT TOTAL DEPT	н: "ММ	SW-216	8'FS	+ 333	LEW.	× 2	1/11	,,,,	0.3	) n n -		1	2. COUN			13. STATE	
14. DATE SPUDDE		15. DATE T.			16. DATI			-34	<i>U</i> 3.	37 F	-WL		UINT		ONS (DF, R	UTA	<del>П</del>
7/23/2012		9/4/20				1/2012			ABANDONE	D _	READY TO PE	ODUCE 🗸		5557		.b, K1, GL).	
18. TOTAL DEPTH:	•	1,024 0,96 <b>8/</b> <i>9</i>		19. PLUG	BACK T.E	D.: MD TVD			20. IF M	ULTIPLE CO	OMPLETIONS,	HOW MANY?	)* 21. E	EPTH B	SET:	D VD	
22. TYPE ELECTRIC		_	ICAL LO	GS RUN (	Submit cop	y of each	)			23.							
TRIPLE CO	мво	CBL								WAS WELL	L CORED? RUN?		10 <b>V</b>	YES YES	<b>三</b> `	ibmit analysis) ibmit report)	
		····									NAL SURVEY?		10 🔲	YES	물 `	bmit copy)	
24. CASING AND L	INER RECO	RD (Report a	ll string	s set in w	ell)												_
HOLE SIŽE	SIZE/GI	RADE	WEIGHT	`(#/ft.)	TOP (	(MD)	вотто	M (MD)		EMENTER PTH	CEMENT TYI NO. OF SAC		LURRY JME (BBL	.) CE	MENT TOP	** AMOUNT PULI	LED
9.875	7.625	P116	29.	.7	C	)	3,6	90			680		277				
6.75	4.5	HCP	11.6		0		11,025				895		372				=
											· · · · · · · · · · · · · · · · · · ·						
												<u> </u>	· · · · · · · · · · · · · · · · · · ·	_	·		
25. TUBING RECOR	I RD								I					<u> </u>			
SIZE	DEPTH	SET (MD)	PACK	ER SET (	MD)	SIZE		DEPTH	SET (MD)	PACKE	R SET (MD)	SIZE	I	DEPT	H SET (MD)	PACKER SET (N	/ID)
2.375	10	),875	<u> </u>														
26. PRODUCING IN		1 700	***								RATION RECO						
(A) MESA VE		10,			900 900	IOP	(TVD)	BOTTO	M (TVD)	10,124	L (Top/Bot - ME 10,9			OLES	Open D	ORATION STATUS Squeezed	—
(B)	INDL	10,	127	10,	,300					10,124	10,9	.42	<del>' '</del>	09	Open	Squeezed	—
(C)				ļ	*****							-	_		Open	Squeezed Squeezed	
(D)													RE	Œ	/ED	Squeezed	—
28. ACID, FRACTU	RE, TREAT!	MENT, CEME	NT SQU	EEZE, ET	<u>с.</u>	<b>L</b>	······································	<u> </u>						Viel			<b></b> ,
DEPTH	INTERVAL								AMC	UNT AND T	YPE OF MATE	RIAL (	et	17	2012		
10,124 - 10,	900		14,0	37 BE	SLS SL	.ICKW	/ATER	340,	000 LB	S 30/50	SAND				o e assaula	Δ	_
												0(	V.UFU	L, GA	SEMININ		_
29. ENCLOSED AT	TACHMENT	rs:	<u> </u>												30. W	ELL STATUS:	
ELECT	RICAL/MEC	CHANICAL LO	GS					GEOLOG	IC REPORT		DST REPORT		ECTIONA	L SURV	/EY	PGW	
SUND	RY NOTICE	FOR PLUGG	ING AND	CEMENT	VERIFICA	ATION		CORE AN	IALYSIS		OTHER: OP	S SUMN	//ARY		- 1	FGVV	

31.	INITIAL PRODUCTIO
DA	TE FIRST PRODUCED

## INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 9/22/2012		TEST DATE:	_	HOURS TESTER	-		OIL - BBL:	GAS - MCF:	WATER BBL:	PROD. METHOD:
		9/25/201	2		24	RATES: →	25	2,123	854	FLOWS
22/64	TBG. PRESS. 1,882	CSG. PRESS. 3,067	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL: <b>25</b>	GAS – MCF: 2,123	WATER - BBL: 854	INTERVAL STATUS
				INT	ERVAL B (As show	wn in item #26)				
DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER BBL;	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER BBL:	INTERVAL STATUS
				INT	ERVAL C (As show	wn in item #26)				
DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER BBL:	INTERVAL STATUS
				TNI	ERVAL D (As show	wn in item #26)	4			<u> </u>
DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL BBL;	GAS MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER – BBL;	INTERVAL STATUS

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				GREEN RIVER MAHOGANY WASATCH MESA VERDE SEGO	2,873 3,651 6,174 8,383 10,978

35. ADDITIONAL REMARKS (Include plugging procedure)

36.	I hereby certify that the foregoing and attached information is complete and correct as de-	etermined from all available records
•••	r nor only complete and foregoing and accorded information to complete and correct as a	sterrithed from an available records.

NAME (PLEASE PRINT) VALYN DAVIS

TITLE REGULATORY AFFAIRS ANALYST

34. FORMATION (Log) MARKERS:

SIGNATURE

DATE 10/15/2012

This report must be submitted within 30 days of

- completing or plugging a new well
- · drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests
- \* ITEM 20: Show the number of completions if production is measured separately from two or more formations.
- \*\* ITEM 24: Cement Top Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to:

Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

# **QEP ENERGY**

RED WASH (UTAH) RW 13-27B (RW 12B4-27B) PAD RW 12B4-27B - Slot RW 12B4-27 ORIGINAL WELLBORE

27 August, 2012

**Survey: FINAL SURVEYS** 





Project: RED WASH (UTAH)

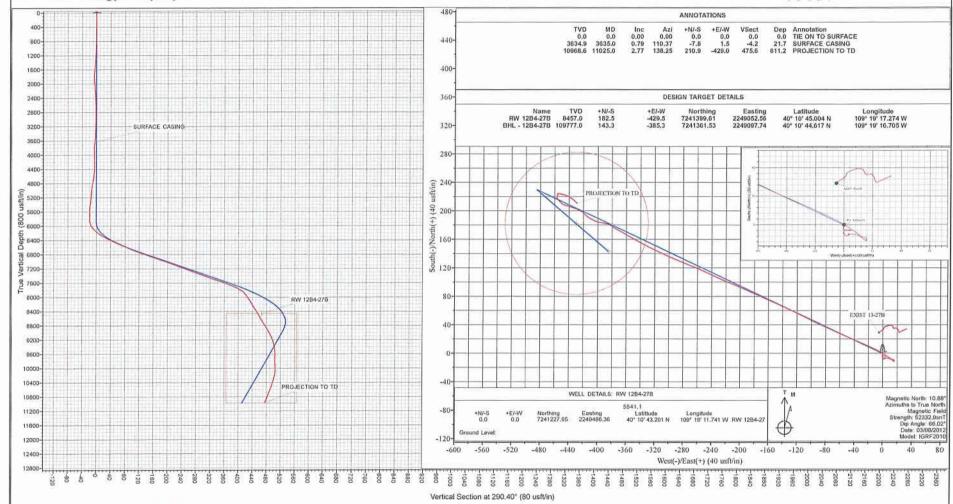
Site: RW 13-27B (RW 12B4-27B) PAD

Well: RW 12B4-27B

Wellbore: ORIGINAL WELLBORE

Design: FINAL SURVEYS







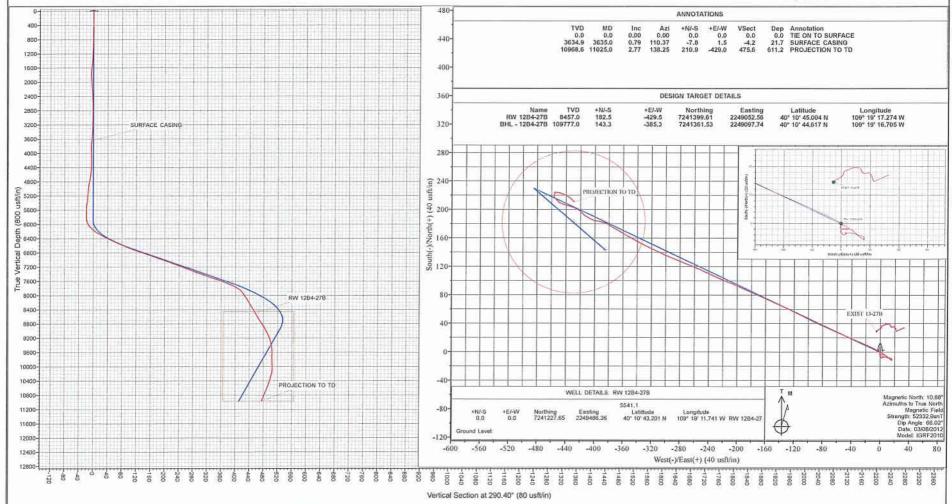
Project: RED WASH (UTAH)

Site: RW 13-27B (RW 12B4-27B) PAD

Well: RW 12B4-27B

Wellbore: ORIGINAL WELLBORE Design: FINAL SURVEYS





## Survey Report



Company: Project:

**QEP ENERGY** 

RED WASH (UTAH)

Site:

RW 13-27B (RW 12B4-27B) PAD

Well:

RW 12B4-27B

Wellbore:

Design:

ORIGINAL WELLBORE

FINAL SURVEYS

Local Co-ordinate Reference:

**TVD Reference:** 

**MD** Reference:

North Reference: **Survey Calculation Method:** 

Database:

Well RW 12B4-27B - Slot RW 12B4-27

KB-EST @ 5557.1usft (Original Well Elev) KB-EST @ 5557.1usft (Original Well Elev)

True

Minimum Curvature

EDM\_5000 1 7

**Project** 

RED WASH (UTAH)

Map System: Geo Datum: Map Zone:

US State Plane 1983

North American Datum 1983 Utah Central Zone

System Datum:

Mean Sea Level

Using geodetic scale factor

Site

RW 13-27B (RW 12B4-27B) PAD

Site Position: From:

Northing:

7,241,227.65 usft

Latitude:

Longitude:

40° 10' 43,201 N

Position Uncertainty:

Lat/Long

Easting: Slot Radius: 2,249,486.36 usft 13-3/16"

**Grid Convergence:** 

109° 19' 11.741 W

1.40 °

Well **Well Position**  RW 12B4-27B - Slot RW 12B4-27 +N/-S

0.0 usft

0.0 usft Northing:

7.241.227.65 usfl

Latitude:

40° 10' 43.201 N

+E/-W Position Uncertainty

0.0 usft 0.0 usft Easting: Wellhead Elevation:

usfi

2,249,486.36 usfl

Longitude: Ground Level:

66.02

109° 19' 11.741 W 5,541.1 usft

Wellbore

**ORIGINAL WELLBORE** 

**Magnetics** 

**Model Name** IGRF2010 Sample Date 03/08/2012 Declination (°) 10.88 Dip Angle

**Field Strength** 

(nT)

52,333

Design

**Audit Notes:** 

Version:

1.0

Phase:

**ACTUAL** 

Tie On Depth:

0.0

Vertical Section:

Depth From (TVD) (usft) 0.0

+N/-S (usft) 0.0

+E/-W (usft) 0.0

Direction (°) 290.40

Survey Program From

(usft)

Date 27/08/2012

FINAL SURVEYS

To (usft)

Survey (Wellbore)

**Tool Name** 

Description

206.0

11,025.0 FINAL SURVEYS (ORIGINAL WELLBORI MWD

MWD - Standard

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
TIE ON	TO SURFACE		er og er en en sekke mer en	er van destable veren interestrienen perioden, er veren ingel 1807 - Egipt May et salande kanten veren fan de greek yn de vere	ant of transfer and appears account a separate of the second	el Berkeren (n. 1985) and an entire transit Revent interest en region of a revent and group that arguest transition and group	menter eta para de la companione de la c	maka dina dina arawa maka sebagai na mina mina maka maka maka maka maka maka maka ma	ad Maren and Constitution of the Constitution	The rate of the state of the st
0.0	0.00	0.00	0.0	5,557.1	0.0	0.0	0.0	0.00	0.00	0.00
206.0	0.44	185.26	206.0	5,351.1	-0.8	-0.1	-0.2	0.21	0.21	0.00
295.0	0.22	207.58	295.0	5,262.1	-1.3	-0.2	-0.3	0.28	-0.25	25.08
385.0	0.40	188.00	385.0	5,172.1	-1.7	-0.3	-0.3	0.23	0.20	-21.76
474.0	0.40	204.24	474.0	5,083.1	-2.3	-0.5	-0.4	0.13	0.00	18.25
563.0	0.18	212.76	563.0	4,994.1	-2.7	-0.7	-0.3	0.25	-0.25	9.57
654.0	0.13	174.97	654.0	4,903.1	-3.0	-0.7	-0.3	0.12	-0.05	-41.53
748.0	0.09	135.42	748.0	4,809.1	-3.1	-0.7	-0.4	0.09	-0.04	-42.07
838.0	0.18	74.51	838.0	4,719.1	-3.1	-0.5	-0.6	0.17	0.10	-67.68
930.0	0.18	124.26	930.0	4,627.1	-3.2	-0.2	-0.9	0.16	0.00	54.08
1,024.0	0.18	49.46	1,024.0	4,533.1	-3.2	0.0	-1.1	0.23	0.00	-79.57
1,119.0	0.22	144.21	1,119.0	4,438.1	-3.2	0.2	-1.3	0.31	0.04	99.74

## Survey Report



Company: Project:

QEP ENERGY

RED WASH (UTAH) RW 13-27B (RW 12B4-27B) PAD

 Site:
 RW 13-27B (R

 Well:
 RW 12B4-27B

 Wellbore:
 ORIGINAL WE

ORIGINAL WELLBORE FINAL SURVEYS

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Database:

Well RW 12B4-27B - Slot RW 12B4-27 KB-EST @ 5557.1usft (Original Well Elev) KB-EST @ 5557.1usft (Original Well Elev)

True

Minimum Curvature EDM\_5000\_1\_7

C	)e	si	g	n:	
S	u	r٧	re	y	

Measured Depth	Inclination		Vertical Depth	Subsea Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
1,214.0	0.26	100.88	1,214.0	4,343.1	-3.4	0.5	-1.7	0.19	0.04	-45.61
1,309.0 1,404.0	0.35 0.31	114.15 75.04	1,309.0 1,404.0	4,248.1 4,153.1	-3.6	1.0	-2.2	0.12	0.09	13.97
			·		-3.6	1.5	-2.7	0.24	-0.04	-41.17
1,498.0	0.70	92.18	1,498.0	4,059.1	-3.6	2.3	-3.4	0.44	0.41	18.23
1,593.0 1,688.0	0.75	100.88	1,593.0	3,964.1	-3.7	3.5	-4.6	0.13	0.05	9.16
1,783.0	0.88 0.21	92.97 301.53	1,688.0 1,783.0	3,869.1	-3.9	4.9	-5.9	0.18	0.14	-8.33
1,878.0	0.21	277.36	1,763.0	3,774.1 3,679.1	-3.8 -3.7	5.4 4.8	-6.4 -5.8	1.13	-0.71	-159.41
			·					0.46	0.43	-25.44
1,973.0 2.069.0	0.48 0.40	269.63 259.26	1,973.0	3,584.1	-3.6	3.9	-4.9	0.17	-0.15	-8.14
2,164.0	0.40	259.26 263.13	2,069.0 2,164.0	3,488.1 3,393.1	-3.7	3.2	-4.2	0.12	-0.08	-10.80
2,104.0	0.31	237.20	2,104.0	3,298.2	-3.8 -3.9	2.5 1.9	-3.6	0.03	0.01	4.07
2,354.0	0.35	280.88	2,353.9	3,203.2	-3.9 -4.0	1.9	-3.2 -2.7	0.20 0.26	-0.11 0.04	-27.29 45.98
2,449.0	0.44									
2,544.0	0.44	271.30 235.44	2,448.9 2,543.9	3,108.2 3,013.2	-4.0	0.8	-2.1	0.12	0.09	-10.08
2,639.0	0.20	280.88	2,638.9	2,918.2	-4.1 -4.2	0.2 -0.1	-1.6 -1.3	0.29	-0.19	-37.75
2,734.0	0.10	100.88	2,733.9	2,823.2	-4.2 -4.1	-0.1 -0.2	-1.3 -1.2	0.20 0.34	-0.04	47.83
2,829.0	0.31	188.51	2,828.9	2,728.2	-4.4	-0.2	-1.4	0.34	-0.13 0.22	189.47 92.24
2,925.0	0.35	176.55	2,924.9	2,632.2						
3,020.0	0.33	229.82	3,019.9	2,632.2 2,537.2	-5.0 -5.3	-0.2 -0.3	-1.6 -1.6	0.08	0.04	-12.46
3,116.0	0.18	207.58	3,019.9	2,337.2	-5.5 -5.6	-0.3 -0.5	-1.6 -1.5	0.30 0.07	-0.18	56.07
3,211.0	0.24	161.52	3,210.9	2,346.2	-5.9	-0.5	-1.6	0.07	0.00 0.06	-23.17 -48.48
3,306.0	0.21	70.38	3,305.9	2,251.2	-6.0	-0.3	-1.9	0.10	-0.03	- <del>4</del> 6.46 -95.94
3,401.0	0.53	110.64	3,400.9	2,156.2	-6.1	0.3				
3,496.0	0.66	184.90	3,495.9	2,160.2	-6.8	0.3	-2.4 -3.0	0.41 0.76	0.34 0.14	42.38 78.17
3,592.0	0.57	117.40	3,591.9	1,965.2	-7.6	1.1	-3.6	0.70	-0.09	-70.31
SURFA	ACE CASING				·				0.00	
3,635.0	0.79	110.37	3,634.9	1,922.2	-7.8	1.5	-4.2	0.55	0.51	-16.35
3,776.0	0.88	51.40	3,775.9	1,781.2	-7.5	3.3	-5.7	0.59	0.06	-41.82
3,871.0	0.48	318.06	3,870.9	1,686.2	-6.7	3.6	-5.7	1.08	-0.42	-98.25
3,966.0	0.22	176.91	3,965.9	1,591.2	-6.6	3.3	-5.4	0.70	-0.27	-148.58
4,060.0	0.35	251.44	4,059.9	1,497.2	-6.9	3.1	-5.3	0.38	0.14	79.29
4,155.0	0.26	0.07	4,154.9	1,402.2	-6.7	2.8	-5.0	0.52	-0.09	114.35
4,250.0	0.26	20.20	4,249.9	1,307.2	-6.3	2.9	-4.9	0.10	0.00	21.19
4,345.0	0.04	69.59	4,344.9	1,212.2	-6.1	3.0	-4.9	0.25	-0.23	51.99
4,440.0	0.57	141.84	4,439.9	1,117.2	-6.5	3.3	-5.4	0.59	0.56	76.05
4,535.0	1.01	78.64	4,534.9	1,022.2	-6.7	4.4	-6.5	0.96	0.46	-66.53
4,630.0	0.26	75.74	4,629.9	927.2	-6.5	5.4	-7.4	0.79	-0.79	-3.05
4,725.0	1.32	94.73	4,724.9	832.2	-6.5	6.7	-8.6	1.13	1.12	19.99
4,820.0	1.27	110.37	4,819.9	737.2	-7.0	8.8	-10.7	0.37	-0.05	16.46
4,914.0	0.66	95.34	4,913.8	643.3	-7.4	10.3	-12.3	0.70	-0.65	-15.99
5,009.0	0.79	138.67	5,008.8	548.3	-7.9	11.3	-13.4	0.58	0.14	45.61
5,103.0 5,198.0	0.48	79.79	5,102.8	454.3	-8.3	12.1	-14.3	0.72	-0.33	-62.64
	0.57	105.27	5,197.8	359.3	-8.4	13.0	-15.1	0.26	0.09	26.82
5,293.0	0.09	73.81	5,292.8	264.3	-8.5	13.5	-15.6	0.52	-0.51	-33.12
5,388.0	1.32	100.88	5,387.8	169.3	-8.7	14.7	-16.8	1.31	1.29	28.49
5,482.0	0.57	153.35	5,481.8	75.3	-9.3	15.9	-18.2	1.14	-0.80	55.82
5,578.0 5,673.0	0.18 0.44	280.88 175.41	5,577.8 5,672.8	-20.7 -115.7	-9.7	16.0	-18.4	0.72	-0.41	132.84
					-10.0	15.9	-18.4	0.55	0.27	-111.02
5,768.0	0.40	171.28	5,767.8	-210.7	-10.7	16.0	-18.7	0.05	-0.04	-4.35
	0.44	224.81	5,854.8	-297.7	-11.3	15.8	-18.7	0.44	0.05	61.53
5,855.0 5,963.0	3.08	315.07	5,962.7	-405.6	-9.5	13.4	-15.9	2.88	2.44	83.57

#### Survey Report



Company: Project: Site: Well:

Wellbore:

Design:

QEP ENERGY RED WASH (UTAH)

RW 13-27B (RW 12B4-27B) PAD

RW 12B4-27B

ORIGINAL WELLBORE FINAL SURVEYS

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Database:

Well RW 12B4-27B - Slot RW 12B4-27 KB-EST @ 5557.1usft (Original Well Elev) KB-EST @ 5557.1usft (Original Well Elev)

True

Minimum Curvature EDM\_5000\_1\_7

vey			A CONTRACTOR OF THE CONTRACTOR	A control of the Cont		The control of the co				
Weasured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,152.0	6.94	300.13	6,151.0	-593.9	0.3	0.2	-0.1	2.24	2.05	-8.79
6,242.0	9.14	295.38	6,240.1	-683.0	6.1	-10.9	12.4	2.55	2.44	-5.28
6,337.0	9.98	293.89	6,333.8	-776.7	12.7	-25.3	28.1	0.92	0.88	-1.57
6,432.0	12.44	293.80	6,427.0	-869.9	20.1	-42.2	46.5	2.59	2.59	-0.09
6,527.0 6,622.0	12.66	294.77	6,519.7	-962.6	28.6	-61.0	67.1	0.32	0.23	1.02
	13.23	293.62	6,612.3	-1,055.2	37.3	-80.4	88.4	0.66	0.60	-1.21
6,717.0	14.85	297.32	6,704.4	-1,147.3	47.3	-101.2	111.3	1.95	1.71	3.89
6,812.0 6,907.0	16.22 16.22	295.91 293.98	6,796.0	-1,238.9	58.7	-123.9	136.6	1.50	1.44	-1.48
7,002.0	16.22	293.96 293.62	6,887.2 6,978.4	-1,330.1 -1,421.3	69.8 80.5	-148.0	163.0	0.57	0.00	-2.03
7,098.0	15.03	294.68	7,070.9	-1, <del>42</del> 1.3 -1,513.8	91.0	-172.1 -195.6	189. <b>4</b> 215.1	0.18 1.13	-0.15	-0.38
7,193.0									-1.09	1.10
7,193.0	15.47 14.77	291.16 297.05	7,162.6 7,253.3	-1,605.5 -1,696.2	100.7	-218.7	240.1	1.08	0.46	-3.71
7,382.0	15.16	291.60	7,255.5 7,345.1	-1,096.2 -1,788.0	110.7 120.8	-241.0 -263.4	264.5 288.9	1.80	-0.74	6.27
7,477.0	15.64	292.75	7,436.7	-1,700.0	130.3	-286.7	314.2	1.54 0.60	0.41 0.51	-5.74
7,572.0	17.14	294.42	7,527.8	-1,970.7	141.1	-311.3	340.9	1.65	1.58	1.21 1.76
7,666.0	15.07	298.72	7,618.1	-2.061.0	152.7					
7,761.0	12.74	299.25	7,710.3	-2,061.0 -2,153.2	163.7	-334.6 -354.6	366.8 389.4	2.54	-2.20	4.57
7,856.0	9.20	299.55	7,710.3	-2,133.2 -2,246.5	172.6	-354.6 -370.3	407.3	2.46 3.73	-2.45 -3.73	0.56
7,950.0	5.05	304.26	7,896.9	-2,339.8	178.6	-380.3	418.7	4.45	-3.73 -4.41	0.32 5.01
8,045.0	3.78	285.54	7,991.6	-2,434.5	181.8	-386.8	425.9	2.01	-1.34	-19.71
8,140.0	3.96	280.88	8.086.4	-2.529.3	183.3	-393.0	432.2	0.38		
8,235.0	3.34	278.77	8,181.2	-2,624.1	184.3	-393.0	432.2	0.36	0.19 -0.65	-4.91 -2.22
8,330.0	3.52	299.42	8,276.0	-2,718.9	186.2	-404.2	443.8	1.31	0.19	-2.22 21.74
8,425.0	3.87	296.26	8,370.8	-2,813.7	189.0	-409.6	449.8	0.43	0.13	-3.33
8,521.0	3.65	309.80	8,466.6	-2,909.5	192.4	-414.9	455.9	0.95	-0.23	14.10
8,617.0	3.52	320.34	8,562.4	-3,005.3	196.6	-419.1	461.4	0.70	-0.14	10.98
8,713.0	3.56	295.21	8,658.2	-3,101.1	200.2	-423.7	466.9	1.60	0.04	-26.18
8,809.0	3.69	292.92	8,754.0	-3,196.9	202.7	-429.2	473.0	0.20	0.14	-2.39
8,905.0	3.69	286.24	8,849.8	-3,292.7	204.7	-435.1	479.1	0.45	0.00	-6.96
9,001.0	3.38	293.01	8,945.7	-3,388.6	206.7	-440.6	485.0	0.54	-0.32	7.05
9,097.0	3.03	282.91	9,041.5	-3,484.4	208.4	-445.7	490.4	0.69	-0.36	-10.52
9,193.0	2.77	310.94	9,137.4	-3,580.3	210.4	-449.9	495.1	1.49	-0.27	29.20
9,289.0	2.07	321.75	9,233.3	-3,676.2	213.3	-452.8	498.7	0.87	-0.73	11.26
9,383.0	1.49	306.63	9,327.3	-3,770.2	215.4	-454.8	501.3	0.79	-0.62	-16.09
9,478.0	1.54	336.60	9,422.2	-3,865.1	217.3	-456.3	503.4	0.83	0.05	31.55
9,573.0	0.88	5.08	9,517.2	-3,960.1	219.2	-456.7	504.5	0.92	-0.69	29.98
9,668.0	0.97	21.51	9,612.2	-4,055.1	220.7	-456.4	504.7	0.29	0.09	17.29
9,763.0	0.92	36.54	9,707.2	-4,150.1	222.0	-455.6	504.4	0.27	-0.05	15.82
9,857.0 9,952.0	0.35 0.48	331.76 286.26	9,801.2	-4,244.1	222.9	-455.3	504.4	0.89	-0.61	-68.91
			9,896.2	-4,339.1	223.3	-455.8	505.1	0.36	0.14	-47.89
10,047.0	0.22	11.93	9,991.2	-4,434.1	223.6	-456.2	505.5	0.54	-0.27	90.18
10,142.0 10,236.0	0.62 0.97	49.64 94.82	10,086.2	-4,529.1	224.1	-455.7	505.3	0.49	0.42	39.69
10,230.0	1.98	94.62 98.59	10,180.2 10,274.1	-4,623.1 -4,717.0	224.3 224.0	-454.6 -452.2	504.2	0.74	0.37	48.06
10,425.0	1.80	98.70	10,369.1	-4,717.0 -4,812.0	223.5	-432.2 -449.1	501.9 498.8	1.08 0.19	1.07 -0.19	4.01 0.12
			,	•						
10,520.0 10,615.0	1.94 1.99	114.42 113.79	10,464.0 10,559.0	-4,906.9 -5,001.9	222.7	-446.1	495.8	0.56	0.15	16.55
10,709.0	2.46	113.79	10,559.0	-5,001.9 -5,095.8	221.3 219.9	-443.2 -439.8	492.5 488.9	0.06 0.50	0.05 0.50	-0.66
10,804.0	2.60	127.44	10,747.8	-5,095.6 -5,190.7	217.7	-439.6 -436.2	484.8	0.50	0.50	0.01 14.36
10,899.0	2.42	131.64	10,747.0	-5,130.7 -5,285.6	215.1	-433.0	480.8	0.03	-0.19	4.42
10,980.0										
III WXII (1	2.77	138.25	10,923.6	-5,366.5	212.5	-430.4	477.5	0.57	0.43	8.16

#### Survey Report



Company: **QEP ENERGY** Local Co-ordinate Reference: Well RW 12B4-27B - Slot RW 12B4-27 Project: RED WASH (UTAH) TVD Reference: KB-EST @ 5557.1usft (Original Well Elev) Site: RW 13-27B (RW 12B4-27B) PAD MD Reference: KB-EST @ 5557.1usft (Original Well Elev) Well: RW 12B4-27B North Reference: True Wellbore: ORIGINAL WELLBORE Survey Calculation Method: Minimum Curvature Design: FINAL SURVEYS Database: EDM 5000 1 7 Survey Measured Vertical Subsea Vertical Turn Dogleg Build Depth Depth Inclination **Azimuth** Depth +N/-S Section +E/-W Rate Rate Rate (usft) (usft) (usft) (usft) (usft) (usft) (°/100usft) (°/100usft) (°) (°/100usft) PROJECTION TO TO 11,025.0 2.77 138.25 10,968.6 -5,411.5 210.9 -429.0 475.6 0.00 0.00 0.00 **Targets Target Name** - hit/miss target Dip Angle Dip Dir. +N/-S TVD +E/-W **Northing** Easting - Shape (°) (usft) (usft) (°) (usft) (usft) (usft) Latitude Longitude BHL - 12B4-27B 7,241,361.53 0.00 0.00 109,777.0 143.3 -385.3 2,249,097.74 40° 10' 44.617 N 109° 19' 16.705 W - survey misses target center by 98808.4usft at 11025.0usft MD (10968.6 TVD, 210.9 N, -429.0 E) - Point RW 12B4-27B 0.00 0.00 8,457.0 182.5 -429.5 7,241,399.61 2,249,052.56 40° 10' 45.004 N 109° 19' 17.274 W - survey misses target center by 17.9usft at 8511.9usft MD (8457.5 TVD, 192.0 N, -414.4 E) - Circle (radius 100.0) **Survey Annotations** Vertical Measured **Local Coordinates** Depth Depth +N/-S +E/-W (usft) (usft) (usft) (usft) Comment 0.0 0.0 0.0 0.0 TIE ON TO SURFACE 3,635.0 3.634.9 -7.8 SURFACE CASING 1.5 11,025.0 10,968.6 210.9 -429.0PROJECTION TO TD Checked By: Approved By: Date:

# **QEP Energy Company**

#### **QEP Energy Operations Summary Report**

Well Name: RW 12B4-27B

Surface Legal Location State UTAH Field Name Well Configuration Type 43-047-52234 027007S023E27 RED WASH Ground Elevation (ft) asing Flange Elevation (ft) Current KB to GL (ft) Spud Date Rig Release Date 5,541.1 5,541.10 16.00 16.00 8/9/2012 12:00 9/6/2012 06:00

Report End Date: 9/6/2012

End Depth (ftOTH): 11,025.0

Operations at Report Time: RIG DOWN RIG RELEASE @ 06:00

HRS 9/6/2012

Operations Next Report Period: RIG DOWN & MOVE RIG

7/2 - 1/2 - 1/2	Cum Dur	<del></del>	I	T	r	T
Dur (hr)	(hr)	Phase	Code	Sub - Code	Ops Category	Com
2.50		DRLPRO	СМТ	2	P	FILL LINES W/3 BBLS FRESH WATER, PRESSURE TEST LINES TO 5000 PSI, PUMP 10 BBLS FRESH WATER, PUMP 20 BBLS SUPER FLUSH 101 10.8 PPG 2.12 Y 12.29 GAL/SK, PUMP 10 BBLS FRESH WATER, PUMP 276.32 BBLS LEAD CEMENT 11 PPG 2.90 Y 17.18 GAL/SK 535 SK., PUMP 95.53 BBLS TAIL CEMENT 13.5 PPG 1.49 Y 7.04 GAL/SK 360 SK, DROP PLUG, WASH PUMP & LINES, PUMP 170 BBLS KCL WATER DISPLACEMENT 8.5PPG, BUMPED PLUG W/2550 PPSI 500 PSI OVER, CHECK FLOATS OK, 55 BBLS CEMENT BACK TO SURFACE
1.00	3.50	DRLPRO	СМТ	<b>2</b>	<b>P</b>	FLUSH BOP, FLOW LINE, GAS BUSTER, W/SUGER WATER
2.50	6.00	DRLPRO	ВОР	<b>1</b>	P	NIPPLE DOWN BOP, RIG UP STACK LIFT
2.00	8.00	DRLPRO	ВОР	2 Section giates	P	SET SLIPS W/155K, & R/D STACK LIFT
16.00	24.00	DRLPRO	LÔC	7	P	CLEAN MUD PITS & R/D FLOOR, TOP DRIVE RIG RELEASE @ 06:00 HRS 9/6/2012

Report End Date: 9/5/2012

Operations at Report Time: CEMENT 4.5 CASING

End Depth (ftOTH): 11,025.0

Operations Next Report Period: CEMENT, NIPPLE DOWN, SET SLIPS, RIG DOWN.

l	O		<del></del>	r	P	
Dur (hr)	Cum Dur (hr)	Phase	Code	Sub - Code	Ops Category	Com
6.50	6.50	CSGPRO	CSG	2	P	RUN 4 1/2 CASING.FILL CASING, CIRCULATE BU AT 3,900 FT. FILL CASING EVERY 25 JTS. LOST CIRCULATION AT 7430.
4.00	10.50	CSGPRO	CIRC	2.	U	LOST CIRCULATION AT 7430 FT. MIX MUD, WORK PIPE AND MIX LCM.
4.00	14.50	CSGPRO	CIRC	1	P	CIRCULATE, BUILD VOLUME, EVEN OUT MUD.
6.00	20.50	CSGPRO	csg	2	P	RUN CASING AND CIRCULATE EVERY 500 FT. FROM 7,430 TO 10,600 FT. WASH LAST 500 FT TO BOTTOM. 56 FT. OF FILL
2.00	22.50	CSGPRO	CIRC	1	P	CIRCULATE W / CASING ON BOTTOM. RAN 237 JTS. OF 4 1/2, 11.60, HCP-110,LT&C CASING. LANDED AT 11,019 RKB.
1.50	24.00	CSGPRO	CMT	2	P	PJSM, CEMENT 4.5 CASING.

Report End Date: 9/4/2012

End Depth (ftOTH): 11,025.0

Operations at Report Time: PJSM RIG CASEING CREW

Operations Next Report Period: RUN CASING, CIRC R/D CASER, R/U CEMENTER,

& CEMENT

**QEP Energy Company** 

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Well Name: RW 12B4-27B

API 43-047-5	2234		Surface Legal L 027007S02		Field Name RED WASH		State UTAH	110	W	fell Configuration Type
Ground Elev	vation (ft)	5,541.1 Cas	sing Flange Ele	vation (ft) Curre 5,541.10	ent KB to GL (ft) 16.00	Current KB to CF (ft)	Spud 16.00	Date 8/9/2012 12;	00	Rig Release Date 9/6/2012 06:00
Dur (hr)	Cum Dur (hr)	Phase	Ð	Code	s	ub - Code	Op	s Category		Com
7.50	7.50	EVALPR		LOG	1		P		PER HR RETREI	WITH THRBIT AT 800 FT. 8. TO 6,432 FT. VE LOGGING TOOL AND WN LOGGERS.
1.50	9.00	CSGPRO		TRP	2		P		DRILL P	AT 9,000 FT. SAFETY
1.50	10.50	CSGPRO		CIRC	1		Р		AND CA	ATE TO LAY DOWN DP SING. OUT LCM.
1.00	11.50	CSGPRO	4 /	TRP	3		P		PJSM,F	RIG UP LAY DOWN CREW
6.50	18.00	CSGPRO	** * * * * * * * * * * * * * * * * * * *	TRP	3		Р		LAY DO	WN DRILL PIPE.
0.50	18.50	CSGPRO		TRP	2	ar ex	Р			TH COLLARS AND WT. PIP DERRICK
2.00	20.50	CSGPRO		TRP	3		Р		LAY DO	WN WT PIPE AND DRILL RS
0.50	21.00	CSGPRO		ОТН	l		P		PULL W	EAR BUSHING
3.00	24.00	CSGPRO		CSG	1		Р		1 .	RIG UP CASING CREW
Report E	nd Date	9/3/2012		71.4.1	End	Depth (ftOTH):	11,025.0		1	

Operations at Report Time: LOGGING W / DRILL PIPE

Operations Next Report Period: LOG, TIH, CIRC., RIG L/D TRUCK, L/D DP, RIG UP

CASING CREW

			The state of the s			
Dur (hr)	Cum Dur (hr)	Phase	Code	Sub - Code	Ops Category	Com
3.50	3.50	EVALPR	TRP	2		TRIP IN WITH THRUBIT AND RABBIT DRILL PIPE. FILL PIPE AT 3,600 AND 8,000 FT.
3.50	7.00	EVALPR	CIRC	2		LOST CIRCULATION AT 8,000 FT., MIX LCM AND BUILD VOLUM.
1.50	8.50	EVALPR	CIRC	1		PULL UP TO 7,000 FT. AND PUMP 75 BBLS OF 20 LBS A BARREL LCM DOWN BACK SIDE
1.00	9.50	EVALPR	TRP	2		PICK UP 15 JTS. AND CIRC. AT 7,500 FT.
0.50	10.00	EVALPR	RIG	1		RIG SERVICE AND TOP DRIVE.
0.50	10.50	EVALPR	TRP	2		PICK UP 18 JTS. OF DRILL PIPE.
1.00	11.50	EVALPR	CIRC	1		CIRCULATE AT 8,000 FT. AND BUILD VOLUME
0.50	12.00	EVALPR	TRP	2		TRIP IN 10 STDS TO 9,000 FT.
3.00	15.00	EVALPR	CIRC	1		CIRCULATE, BUILD VOLUME AND EVEN OUT MUD.
1.00		EVALPR	TRP	2	į.	TRIP IN AND RABBIT DRILL PIPE
2.50	18.50	EVALPR	CIRC	1	***	CIRCULATE BOTTOMS UP AND DISPLACE DRILL PIPE WITH 81 BBLS OF CLEAN MUD
5.50	Marian	EVALPR	LOG	1		PJSM, RIG UP THRU BIT, RUN WIRE LINE LOGS WITH DRILL PIPE.

Report End Date: 9/2/2012

Operations at Report Time: TRIP IN W / THRUBIT TO LOG

End Depth (ftOTH): 11,025.0

Operations Next Report Period: TRIP IN, CIRCULATE, LOG, LAY DOWN DRILL

Dur (hr)	Cum Dur (hr)	Phase	Code	Sub - Code	Ops Category	Com
3.00	3.00	DRLPRO	REAM	1	Р	REAM TO BOTTOM FROM 10,100 TO 11,025.

**QEP Energy Company** 

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Well Name: RW 12B4-27B

API 43-047-5	2234		Surface Legal L 027007S02		Field Name RED WASH	State UTAI	<del></del>	Well Configuration Type
Ground Elev		5,541.1	asing Flange Ele	vation (ft) Curr 5,541.10	ent KB to GL (ft) C	current KB to CF (ft)	Spud Date 8/9/2012 12:0	Rig Release Date 9/6/2012 06:00
Dur (hr)	Cum Dur (hr)	Pha	ise	Code	Sub	- Code	Ops Category	Com
1.50		EVALPR		CIRC	1	Р		CIRCULATE AND PUMP 2 SWEEPS TO CLEAN HOLE FOR SHORT TRIP.
3.50	8.00	EVALPR		TRP	14	P 3		SHORT TRIP 26 STDS. TO 8,650 FT. BACK REAM FROM 10,190 TO 10,100 FT,
1.50	9.50	EVALPR		CIRC	1	P		CIRCULATE BU AND PUMP HEAVEY WT. PILL.
5.00	14.50	EVALPR		TRP	2	Р		TRIP OUT FOR LOGS.
6.00	20.50	EVALPR		LOG	1	Р		PJSM, RIG UP LOGGERS AND LOG. LOGS STOPPED AT 7100 FT. LOG TO BOTTOM OF SURFACE CASING.
3.50		EVALPR		TRP	2	P		PICK UP TRUBIT BIT, FLOAT SUB, AND CROSSOVER SUB AND TRIP IN. DRIFT DRILL PIPE.

Report End Date: 9/1/2012

Operations at Report Time: REAMMING TO BOTTOM

End Depth (ftOTH): 11,025.0

Operations Next Report Period: REAM, CIRC., SHORT TRIP, CRIC., TOOH F/

LOGS,

Dur (hr)	Cum Dur (hr)	Phase	Code	Sub - Code	Ops Category	Com
1.00	1.00	EVAL 1	TRP	2	P	TRIP OUT OF HOLE
0.50	1.50	DRLPRO	TRP	<b>1</b> - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	P 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	BREAK DOWN EM TOOL TO DOWN LOAD
1.50	3.00	DRLPRO	ОТН		Р	EVALUATING OPTIONS.
1.00	4.00	DRLPRO	RIG	1	P': : v	SERVICE RIG AND TOP DRIVE
5.50	9.50	DRLPRO	RIG	2	Р	WORK ON TOP DRIVE.
1.50	11.00	DRLPRO	TRP	1	<b>P</b> . 1,14,14	PICK UP AND MAKE UP PULSE.
1.00	12.00	DRLPRO	TRP	2	Р	TRIP IN HOLE
2.50	14.50	DRLPRO	RIG - 1 - 1 - 1 - 1 - 1	2		RIG REPAIR, GRABBER BOX RAM.
3.50	18.00	DRLPRO	TRP	2	P	TRIP IN HOLE.
0.50	18.50	DRLPRO	REAM	1 .	P 15 girt	REAM FROM 8,840' TO 9,005'
0.50	19.00	DRLPRO	TRP	2	P	TRIP IN HOLE FROM 9,005' TO 9,438'
5.00		DRLPRO	REAM	1	P	REAM FROM 9,438 TO 10100.

Report End Date: 8/31/2012

Operations at Report Time: TRIPPING OUT OF HOLE @ 1000 FT.

End Depth (ftOTH): 11,025.0

Operations Next Report Period: CHANGE OUT BIT & MOTOR, TIH, WASH&REAM

TO BOTTOM, CIRC. TOOH

Dur (hr)	Cum Dur (hr)	Phase	Code	Sub - Code	Ops Category	Com
13.50	13.50	DRLPRO	RIG	2	U	TOP DRIVE DOWN, WAIT ON RENTAL TOP DRIVE. NEW TOP DRIVE GOT ON LOCATION AT 08:00 08/30/2012. HANG AND RIG UP TOP DRIVE, RUN SERVICE LOOP, SET IN TOP DRIVE HOUSE AND HANG CONTROL PANEL.
0.50		DRLPRO	CIRC	1	P	CIRULATE HOLE AND ROTATE DRILL PIPE WITH TOP DRIVE. TRIP OUT AND BACK REAM.
						BACK REAM FROM 9595 TO 7900 FT.

**QEP Energy Company** 

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# SEP.

6.00 DRLPRO

CIRC

1.50

#### **QEP Energy Operations Summary Report**

QEP Energy Company Well Name: RW 12B4-27B Field Name Well Configuration Type 43-047-52234 027007S023E27 **RED WASH UTAH** Ground Elevation (ft) Casing Flange Elevation (ft) Current KB to GL (ft) Current KB to CF (ft) Spud Date Rig Release Date 5,541.10 5,541.1 16.00 16.00 8/9/2012 12:00 9/6/2012 06:00 Report End Date: 8/30/2012 End Depth (ftOTH): 11,025.0 Operations at Report Time: WAIT ON TOP DRIVE Operations Next Report Period: WAIT ON TOP DRIVE, CHANGE OUT TOP DRIVE. TOOH, CHG MOTOR TIH Cum Dur Dur (hr) Phase Code Sub - Code Ops Category 24.00 24.00 DRLPRO RIG RIG REPAIR, TOP DRIVE WON'T TURN, WAIT ON TOP DRIVE WORK DRILL PIPE FROM 9660 TO 9798 FT. AND CIRCULATE CRANE ON LOCATION AT 14:00, RIG UP CRANE. AT 15:00 BREAK OLD TOP DRIVE OFF OF DRILL PIPE, HOOK UP TUBING SWIVEL, CIRCULATE, AND ROTATE DRILL PIPE, [ PUT IN 8 ROUNDS OF TORQUE AND GET 4.5 TO 5 ROUNDS OUT ] BREAK OFF KELLY HOSE, RIG DOWN AND BREAK DOWN OLD TOP DRIVE, SET OUT, AND TAKE DOWN SERVICE LOOP, RIG DOWN AND HAUL IN TOP DRIVE LIGHT PLANT, SCR HOUSE, AND SERVICE LOOP TO FRONTIER YARD.. Report End Date: 8/29/2012 End Depth (ftOTH): 11,025.0 Operations at Report Time: TOP DRIVE WILL NOT TURN, WAIT ON Operations Next Report Period: CHANGE OUT TOP DRIVE ??? TOP DRIVE.& CRIC. Cum Dui Dur (hr) Phase Code Ops Category Sub - Code 24.00 24.00 **CSGPRO** RIG TOP DRIVE WILL NOT TURN, WAIT П ON TOP DRIVE CIRCULATE HOLE WITH ONE PUMP AND WORK DP. Report End Date: 8/28/2012 End Depth (ftOTH): 11,025.0 Operations at Report Time: WAIT ON TOP DRIVE Operations Next Report Period: CHANGE OUT TOP DRIVE ??? Cum Dur Dur (hr) Code Phase Sub - Code Ops Category 24.00 DRLPRO RIG 24.00 TOP DRIVE WILL NOT TURN, WAIT Ū ON TOP DRIVE CIRCULATE HOLE WITH ONE PUMP AND WORK DP. Report End Date: 8/27/2012 End Depth (ftOTH): 11,025.0 Operations at Report Time: WAIT ON TOP DRIVE Operations Next Report Period: WAIT ON TOP DRIVE Cum Dur Dur (hr) Phase Code Sub - Code Ops Category Com 3.50 3.50 DRLPRO DRL DRILL FROM 10944' TO 11025' = 81', 23.1' FPH, RUNNING 1 PUMPS AT 90 SPM, 264 GPM, 3100 PSI, 150 TO 300 PSI DIFF PRESSURE. MUD MOTOR IS A 1.5 BEND, 7/8 LOBE, 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 68 RPM ON MOTOR SPEED= 128 RPM. MUD WT. 10.6 TO 10.7 VIS 36, 14 TO 20 K ON BIT. 4.50 DRLPRO 1.00 OTH Ρ GAMMA FROM 10944 TO 11025.

QEP Energy Company Page 4/17 Report Printed: 10/15/2012

CIRCULATE FOR SHORT TRIP.



Well Name: RW 12B4-27B

<sup>API</sup> 43-047-5	2234		Surface Legal 027007S02		Field Name RED WASH	State UTAH	- 10-1	Well Configuration Type	
Ground Elev	ration (ft)	5,541.1	Casing Flange Ele	evation (ft) 5,541.10	Current KB to GL (ft) Current KB t	0 CF (ft) Spud D	eate 8/9/2012 12:00	Rig Release Date 9/6/2012 06:00	
Dur (hr)	Cum Dur (hr)		hase	Code	Sub - Code	Ops	Category	Com	
2.50	8.50	DRLPRO		TRP	14	P	9660 BAC	DRT TRIP, TRIPPED OUT TO D. CK REAMED AT 9910 TO 9730, D TO 9630.	
0.50	9.00	DRLPRO		RIG	1	P	RIG	SERVICE	
15.00	24.00	DRLPRO		RIG	2	P	DRI' DRI' WO	REPAIR, CAN;T GET TOP VE TO TURN. WORK ON TOP VE, RK PIPE 60 FT. AND WAIT ON ITAL TOP DRIVE.	

Report End Date: 8/26/2012

Operations at Report Time: LOGGING GAMMA

End Depth (ftOTH): 10,944.0

Operations Next Report Period: DRILL, LOG GAMMA, CRIC., SHORT TRIP, CRIC., TOOH F/ LOGS

Dur (hr)	Cum Dur (hr)	Phase	Code	Sub - Code	Ops Category	Com
8.50		DRLPRO	DRL	2	P	DRILL FROM 10187' TO 10565' = 378', 44.5' FPH, RUNNING 1 PUMPS AT 90 SPM, 264 GPM, 3000 PSI, 150 TO 300 PSI DIFF. PRESSURE. MUD MOTOR IS A 1.5 BEND, 7/8 LOBE, 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 73 RPM ON MOTOR SPEED= 128 RPM. MUD WT. 10.4 TO 10.6 VIS 36, 14 TO 20 K ON BIT.
0.50	9.00	DRLPRO	RIG	1 .	Р	SERVICE RIG AND TOP DRIVE
3.00	12.00	DRLPRO	DRL	2	P	DRILL FROM 10565' TO 10660' = 95', 31.6' FPH, RUNNING 1 PUMPS AT 90 SPM, 264 GPM, 3100 PSI, 150 TO 300 PSI DIFF. PRESSURE. MUD MOTOR IS A 1.5 BEND, 7/8 LOBE, 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 68 RPM ON MOTOR SPEED= 128 RPM. MUD WT. 10.4 TO 10.6 VIS 36, 14 TO 20 K ON BIT.
1.00	13.00	DRLPRO	ОТН		P	LOG GAMMA FROM 10600 TO 10660'.
2.00	15.00	DRLPRO	DRL	1	P	DRILL FROM 10660' TO 10753' = 50', 16.6' FPH, RUNNING 1 PUMPS AT 90 SPM, 264 GPM, 3100 PSI, 150 TO 300 PSI DIFF. PRESSURE. MUD MOTOR IS A 1.5 BEND, 7/8 LOBE, 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 73 RPM ON MOTOR SPEED= 128 RPM. MUD WT. 10.4 TO 10.6 VIS 36, 14 TO 20 K ON BIT.
1.00	16.00	DRLPRO	отн		Р	LOG GAMMA FROM 10660 TO 10753'.
2.50	18.50	DRLPRO	DRL	1	P	DRILL FROM 10753' TO 10849' = 96', 38.4' FPH, RUNNING 1 PUMPS AT 90 SPM, 264 GPM, 3100 PSI, 150 TO 300 PSI DIFF. PRESSURE. MUD MOTOR IS A 1.5 BEND, 7/8 LOBE, 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 68 RPM ON MOTOR SPEED= 128 RPM. MUD WT. 10.4 TO 10.6 VIS 36, 14 TO 20 K ON BIT.



Well Name: RW 12B4-27B

API 43-047-5			Surface Legal L 027007S02		Field N RED	lame WASH		State Well Configuration Type UTAH			
Ground Ele	5,541.1			Elevation (ft)   Current KB to GL (ft)   Current KB to C 5,541.10   16.00		Current KB to CF (fi	ft) Spud Date 16.00 8/9/2012 12:00		Rig Release Date 9/6/2012 06:00		
Dur (hr)	Cum Dur (hr)		ase	Code		8	Sub - Code		Ops Category		Com
1.50	20.00	DRLPRO		ОТН				P		LOG GA 10849'.	MMA FROM 10753 TO
3.50	23.50	DRLPRO		DRL		1		P		95', 27. PUMPS PSI, 150 PRESSI BEND, 7 RPM ON MOTOR	ROM 10849' TO 10944' = 1' FPH, RUNNING 1 AT 90 SPM, 264 GPM, 3100 O TO 300 PSI DIFF.  JRE. MUD MOTOR IS A 1.5 7/8 LOBE, 2.6 STAGE, 45/60 N TOP DRIVE, 68 RPM ON SPEED= 128 RPM. MUD 4 TO 10.6 VIS 36, 14 TO 20 T.
0.50	24.00	DRLPRO		ОТН				Р		LOG GA 10900'.	MMA FROM 10849 TO
Report E	Report End Date: 8/25/2012 End Depth (ftOTH): 10,187.0										

Operations at Report Time: DRILLING

Operations Next Report Period: DRILL, RIG SERVICE, DRILL

	Cum Dur	Γ	T		T	
Dur (hr)	(hr)	Phase	Code	Sub - Code	Ops Category	Com
9.00	9.00	DRLPRO	DRL	2	P	DRILL FROM 9142' TO 9523' = 381', 42.3' FPH, RUNNING 1 PUMPS AT 90 SPM, 280 GPM, 2800 PSI, 150 TO 250 PSI DIFF. PRESSURE. MUD MOTOR IS A 1.5 BEND, 7/8 LOBE, 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 73 RPM ON MOTOR SPEED= 128 RPM. MUD WT. 10.2 TO 10.3 VIS 36, 14 TO 20
0.50 14.50	1	DRLPRO DRLPRO	RIG DRL	1 2	P P	K ON BIT.  SERVICE RIG AND TOP DRIVE.  DRILL FROM 9523' TO 10187' = 664', 45.7' FPH, RUNNING 1  PUMPS AT 90 SPM, 280 GPM, 3000  PSI, 150 TO 300 PSI DIFF.  PRESSURE. MUD MOTOR IS A 1.5  BEND, 7/8 LOBE, 2.6 STAGE, 45/60  RPM ON TOP DRIVE, 73 RPM ON  MOTOR SPEED= 128 RPM. MUD  WT. 10.2 TO 10.3 VIS 36, 14 TO 20  K ON BIT.

Report End Date: 8/24/2012

Operations at Report Time: DRILLING

End Depth (ftOTH): 9,142.0

Operations Next Report Period: DRILL, RIG SERVICE, DRILL

Dur (hr)	Cum Dur (hr)	Phase	Code	Sub - Code	Ops Category	Com
4.50	4.50	DRLPRO	DRL	2	P	DRILL FROM 8822' TO 8972' = 150', 33.3' FPH, RUNNING 1 PUMPS AT 100 SPM, 278 GPM, 2800 PSI, 300 TO 450 PSI DIFF. PRESSURE. MUD MOTOR IS A 1.5 BEND, 7/8 LOBE, 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 73 RPM ON MOTOR SPEED= 123 RPM. MUD WT. 9.8 TO 9.9 VIS 34, 12 TO 18 K ON BIT.
1.00	5.50	DRLPRO	CIRC	1	P	CIRCULATE B. U., PUMP WT. PILL.
5.00	10.50	DRLPRO	TRP	12	P	TRIP FOR MUD MOTOR AND BIT. SLM DRILL PIPE.
1.50	12.00	DRLPRO	TRP	2	P	CHANGE OUT MUD MOTOR, BIT,BATTERYS FOR MWD, SCRIBE AND ORIENT TOOLS

**QEP Energy Company** 

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PI 3-047-5	52234		e Legal Location 07S023E27	Field Name RED WASH	State UTAH	Well Configuration Type
round Elev	vation (ft)	Casing Fla	ange Elevation (ft) Cu	rrent KB to GL (ft) Current KB to	o CF (ft) Spud Date	Rig Release Date
	Cum Dur	5,541.1  	5,541.10	16.00	16.00 8/9/2012	12:00 9/6/2012 06:00
Dur (hr)	(hr)	Phase	Code	Sub - Code	Ops Category	Com
2.50		DRLPRO	TRP	2	Р	TRIP IN HOLE TO 3,720 AND FILE PIPE
1.00	15.50	DRLPRO	RIG	6	Р	CUT DRILLING LINE
3.50	19.00	DRLPRO	TRP	2	P	TRIP IN HOLE
0.50	19.50	DRLPRO	REAM	1	P	SAFETY REAM 100' TO BOTTOM
4.50	24.00	DRLPRO	DRL	1	P	DRILL FROM 8972' TO 9142' = 17 37.7' FPH, RUNNING 1 PUMPS A 90 SPM, 260 GPM, 2550 PSI, 150 TO 250 PSI DIFF. PRESSURE. MI MOTOR IS A 1.5 BEND, 7/8 LOBE 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 68 RPM ON MOTOR SPEED= 123 RPM. MUD WT. 10.0 TO 10.1 VIS 36, 12 TO 15 K ON B
		: 8/23/2012 eport Time: SAFET	Y REAM TO BOTTOM	End Depth (ftO Operations Next		SERVICE, DRILL, CIRC.,SHORT TRIF
Distr (bet)	Cum Dur	Dhara	0.4			
Dur (hr) 6.00	(hr) 6.00	Phase DRLPRO	DRL	Sub - Code	Ops Category	DRILL FROM 8300' TO 8470' = 17
						28.3' FPH, RUNNING 1 PUMPS A 100 SPM, 278 GPM, 2550 PSI, 30 TO 450 PSI DIFF. PRESSURE. MI MOTOR IS A 1.5 BEND, 7/8 LOBE 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 73 RPM ON MOTOR SPEED= 123 RPM. MUD WT. 9.6 9.9 VIS 34, 12 TO 18 K ON BIT.
1.50	7.50	DRLPRO	RIG	1	P	SERVICE RIG AND CHANGE SAVER SUB.
13.50	21.00	DRLPRO			P	DRILL FROM 8470' TO 8822' = 38 26.1' FPH, RUNNING 1 PUMPS A 100 SPM, 278 GPM, 2550 PSI, 30 TO 450 PSI DIFF. PRESSURE. MI MOTOR IS A 1.5 BEND, 7/8 LOBE 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 73 RPM ON MOTOR SPEED= 123 RPM. MUD WT. 9.6 9.9 VIS 34, 12 TO 18 K ON BIT.
1.00	22.00	DRLPRO	CIRC	1	Р	CIRCULATE BOTTOMS UP
	l	DRLPRO	TRP	14	P	SHORT TRIP 16 STANDS (7,332'
	ı	DRLPRO	REAM	1	P	SAFETY REAM 60' TO BOTTOM
1.50	1 44.00	: 8/22/2012		End Depth (ftO		
1.50 0.50 eport E	nd Date			Operations Next	Report Period: DRILL AHE	AD
1.50 0.50 eport E	nd Date	eport Time: SLIDIN	3 @ 10 FPH			
1.50 0.50 eport E	End Date ons at Re Cum Dur (hr)	eport Time: SLIDING	Code	Sub - Code	Ops Category	Com
1.50 0.50 eport E	End Date ons at Re Cum Dur (hr)	eport Time: SLIDIN		· · · · · · · · · · · · · · · · · · ·	Ops Category P	Com  DRILL FROM 7555' TO 7900' 345 36.3' FPH, RUNNING 1 PUMPS A 100 SPM, 278 GPM, 2550 PSI, 30 TO 450 PSI DIFF. PRESSURE. MI MOTOR IS A 1.5 BEND, 7/8 LOBE 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 73 RPM ON MOTOR SPEED= 123 RPM. MUD WT. 9.6 9.9 VIS 34, 12 TO 18 K ON BIT SLIDE 30' IN 2 HRS

**QEP Energy Company** 

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Well Name: RW 12B4-27B

API <b>43-047-52234</b>	Surface Lega 027007S0	23E27	Field Name RED WASH	State UTA	Н	Well Configuration Type
Ground Elevation (ft)	Casing Flange E 5,541.1	evation (ft) Curre 5,541.10	ent KB to GL (ft) C 16.00	urrent KB to CF (ft) 16.00	Spud Date 8/9/2012 12:0	Rig Release Date 9/6/2012 06:00
Dur (hr) Cum Dur	Phase	Code	Sub	- Code	Ops Category	Com
14.00   24.00	DRLPRO	DRL	2	P		DRILL FROM 7900' TO 8300' 400', 28.5' FPH, RUNNING 1 PUMPS AT 100 SPM, 278 GPM, 2550 PSI, 300 TO 450 PSI DIFF. PRESSURE. MUD MOTOR IS A 1.5 BEND, 7/8 LOBE, 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 73 RPM ON MOTOR SPEED= 123 RPM. MUD WT. 9.6 TO 9.9 VIS 34, 12 TO 18 K ON BIT SLIDE 72' IN 4.5 HRS

Report End Date: 8/21/2012

Operations at Report Time: SLIDING

End Depth (ftOTH): 7,555.0

Operations Next Report Period: DRILL AHEAD

Dur (br)	Cum Dur	Phone	0-4-	0.1.0.1		
6.00	(hr) 6.00	Phase DRLPRO	DRL Code	Sub-Code 2	Ops Category P	Com DRILL FROM 7015' TO 7178' 163', 27' FPH, RUNNING 1 PUMPS AT 100 SPM, 278 GPM, 2550 PSI, 300 TO 450 PSI DIFF. PRESSURE. MUD MOTOR IS A 1.5 BEND, 7/8 LOBE, 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 73 RPM ON MOTOR SPEED= 123 RPM. MUD WT. 9.4,TO 9.6 VIS 34, 12 TO 18 K ON BIT SLIDE 85' IN 3.8 HRS
0.50 6.00		DRLPRO DRLPRO	RIG DRL	1 2	P P	RIG SERVICE  DRILL FROM 7178' TO 7337' 159', 26.5' FPH, RUNNING 1 PUMPS AT 100 SPM, 278 GPM, 2550 PSI, 300 TO 450 PSI DIFF. PRESSURE. MUD MOTOR IS A 1.5 BEND, 7/8 LOBE, 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 73 RPM ON MOTOR SPEED= 123 RPM. MUD WT. 9.4,TO 9.6 VIS 34, 12 TO 18 K ON BIT SLIDE 49' IN 3.6 HRS
2.00	14.50	DRLPRO	TRP	14	P	SHORT TRIP 16 STANDS, HOLE IN GOOD SHAPE TO 6192 F/ 6192 TO 5971PULLING 25K TO 40K OVER, TRIP IN TAG BRIDGE @ 6336 PICKED UP WENT THROUGH, BRIDGE @ 6623 KELLY UP WASH WITH 8 TO 12K ON BIT TO 6665BRIDGE @6923 PICKED UP WENT THROUGH, SAFETY REAM LAST 90', NO FILL
9.50	24.00	DRLPRO	DRL	2	P	DRILL FROM 7337' TO 7555' 218', 22.9' FPH, RUNNING 1 PUMPS AT 100 SPM, 278 GPM, 2550 PSI, 300 TO 450 PSI DIFF. PRESSURE. MUD MOTOR IS A 1.5 BEND, 7/8 LOBE, 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 73 RPM ON MOTOR SPEED= 123 RPM. MUD WT. 9.4,TO 9.6 VIS 34, 12 TO 18 K ON BIT SLIDE 97' IN 4.6 HRS

Report End Date: 8/20/2012

Operations at Report Time: DRILLING AHEAD @ 50 FPH

End Depth (ftOTH): 7,015.0

Operations Next Report Period: DRILL AHEAD

**QEP Energy Company** 

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Well Name: RW 12B4-27B

PT 13-047-5	2234		Surface Legal Location 027007S023E27	Field Name RED WASH	State UTAF		Well Configuration Type
round Elev	vation (ft)	5,541.1	Casing Flange Elevation (ft) 5,541.	Current KB to GL (ft) Cu		Spud Date 8/9/2012 12:00	Rig Release Date 9/6/2012 06:00
Dur (hr)	Cum Dur (hr)	Ph	ase Coo	de Sub-	Cada		
2.00		DRLPRO	DRL	2	P	36' F SPM 450 F MOT 2.6 S DDRIV SPEI 9.4,V	Com  L FROM 6215' TO 6287' 72', PH, RUNNING 1 PUMPS AT 1, 269 GPM, 2000 PSI, 300 TO PSI DIFF. PRESSURE. MUD OR IS A 1.5 BEND, 7/8 LOBE STAGE, 45/60 RPM ON TOP 1/E, 70 RPM ON MOTOR ED= 120 RPM. MUD WT. 1/IS 34, 10 TO 15 K ON BIT. E 13' IN 1HRS.
0.50	2.50	DRLPRO	RIG	1	Р	RIG	SERVICE
17.50	20.00	DRLPRO	DRL	2	P	DRIL 35.6' 100 S TO 4 MOT 2.6 S DRIV SPEI 9.6 V	L FROM 6287' TO 6911' 624', FPH, RUNNING 1 PUMPS AT SPM, 278 GPM, 2050 PSI, 300 50 PSI DIFF. PRESSURE. MU OR IS A 1.5 BEND, 7/8 LOBE, STAGE, 45/60 RPM ON TOP (E, 73 RPM ON MOTOR ED= 123 RPM. MUD WT. 9.4,T IS 34, 12 TO 18 K ON BIT. E 171' IN 8.8HRS.
1.50		DRLPRO	RIG	8	P		UBLE SHOOT TOP DRIVE ARY, CHANGE ENCODER
2.50	24.00	DRLPRO	DRL	2	Р	41.6' 100 S TO 4 MOT 2.6 S DRIV SPEI 9.6 V	L FROM 6911' TO 7015' 104', FPH, RUNNING 1 PUMPS AT SPM, 278 GPM, 2050 PSI, 300 50 PSI DIFF. PRESSURE. MU OR IS A 1.5 BEND, 7/8 LOBE, STAGE, 45/60 RPM ON TOP (E, 73 RPM ON MOTOR ED= 123 RPM. MUD WT. 9.4,T (IS 34, 12 TO 18 K ON BIT E 17' IN .5 HRS

Operations at Report Time: SLIDING

Operations Next Report Period: DRILL AHEAD

	Cum Dur					
Dur (hr)	(hr)	Phase	Code	Sub - Code	Ops Category	Com
0.50	0.50	DRLPRO	LOG	1	P	R/D SCHLUMBERGER LOGGERS
0.50	1.00	DRLPRO	BOP	2	P	FUNCTION TEST BOP's
2.00	3.00	DRLPRO	TRP	1	P	CHANGE OUT MUD MOTOR, M/U DIR. TOOLS, SCRIBE TEST W/70 SPM 230 PSI & M/U BIT
1.50	4.50	DRLPRO	TRP	2	Р	T.I.H TO SHOE @ 3691'
1.00	5.50	DRLPRO	TRP	2	P	CHANGE OUT SWIVEL PACKING & GRABBER DRYES
1.00	6.50	DRLPRO	TRP	2	P	T.I.H F/3691' TO 5900'
9.50	16.00	DRLPRO	DRL	2	P	DRILL FROM 5900' TO 6200' 300', 31' FPH, RUNNING 1 PUMPS AT 89 SPM, 248 GPM, 1700 PSI, 250 TO 390 PSI DIFF. PRESSURE. MUD MOTOR IS A 1.5 BEND, 7/8 LOBE, 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 64 RPM ON MOTOR SPEED= 109/124 RPM. MUD WT. 9.4,VIS 33, 10 TO 15 K ON BIT. SLIDE 111' IN 4.75HRS.
0.50	16.50	DRLPRO	CIRC	1	Р	CIRCULATE BUILD & PUMP SLUG
2.50	19.00	DRLPRO	TRP	13	Р	TRIP OUT TO CHANGE MWD

**QEP Energy Company** 

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Well Name: RW 12B4-27B

API 43-047-52234		Surface Legal Loca 027007S023E		Field Name RED WASH		State UTAH		We	ell Configuration Type
Ground Elevation (ft)		sing Flange Elevati		ent KB to GL (ft)	Current KB to CF (ft)		ud Date		Rig Release Date
	5,541.1		5,541.10	16.00	1 ' '	16.00	8/9/2012 12:0	00	9/6/2012 06:00
Dur (hr) (hr)	Phas	se	Code	s	ub - Code	(	Ops Category		Com
1.50 20.50	DRLPRÖ	T	RP	2		P			MWD CHECK BIT, BIT UP & HAD 2 PLUGGED
3.00 23.50	DRLPRO	T	RP	13		Р		SHOE 36	HOLE BREAK CIRC & BHA 590, 4945, CHECK SHOT 'S, 6003,6098,6192
0.50 24.00	DRLPRO	D	RL	2		P		30' FPH, SPM, 24 390 PSI MOTOR 2.6 STAC DRIVE, 6 SPEED= 9.4,VIS 3	ROM 6200' TO 6215' 15', RUNNING 1 PUMPS AT 8 8 GPM, 1700 PSI, 250 TO DIFF. PRESSURE. MUD IS A 1.5 BEND, 7/8 LOBE, GE, 45/60 RPM ON TOP 64 RPM ON MOTOR 109/124 RPM. MUD WT. 63, 10 TO 15 K ON BIT. 5' IN .5HRS.
Report End Date	: 8/18/2012	L		End [	Depth (ftOTH):	5 900 0			

Operations at Report Time: RIGGING DOWN LOGGERS

Operations Next Report Period: PICK UP NEW BHA, TRIP IN HOLE, DRILL

	Cum Dur	l	1			
Dur (hr)	(hr)	Phase	Code	Sub - Code	Ops Category	Com
1.00	1.00	DRLPRO	TRP	14	P	WIPER TRIP F/ SHOE @ 3691' TO 5900'
1.00	2.00	DRLPRO	CIRC	1	P	PUMP SWEEP & CIRCULATE B/U
2.50	4.50	DRLPRO	TRP	2	Р	P.O.O.H F/LOGS
5.00	9.50	DRLPRO	LOG	1	P	PJSM R/U SCHLUMBERGER & RUN PLATFORM EXPRESS TO 5895'
3.00	12.50	DRLPRO	TRP	2	P	T.I.H F/CLEAN OUT TO RUN XPT LOGS
1.50	14.00	DRLPRO	CIRC	1	P .	PUMP SWEEP & CIRCULATE
3.00	17.00	DRLPRO	TRP	2	P	P.O.O.H F/LOG #2 XPT
7.00	24.00	DRLPRO	LOG	1	P	PJSM R/U SCHLUMBERGER & RUN XPT TO LAST TEST @ 5581RIG DOWN LOGGERS

Report End Date: 8/17/2012

Operations at Report Time: P.O.O.H F/LOGGING

End Depth (ftOTH): 5,450.0

Operations Next Report Period: LOG, WIPER TRIP, LOG W/XPT

	Cum Dur		T T	<u> </u>		
Dur (hr)	(hr)	Phase	Code	Sub - Code	Ops Category	Com
10.50	10.50	DRLPRO	DRL	2	P	DRILL FROM 5450' TO 5900' 450', 40.9' FPH, RUNNING 1 PUMPS AT 88 SPM, 245 GPM, 1700 PSI, 250 TO 390 PSI DIFF. PRESSURE. MUD MOTOR IS A 1.5 BEND, 7/8 LOBE, 2.6 STAGE, 45/60 RPM ON TOP DRIVE, 63 RPM ON MOTOR SPEED= 113 RPM. MUD WT. 8.9 TO 9.4,VIS 33, 10 TO 15 K ON BIT. SLIDE 25' IN 2.10HRS.
0.50	11.00	DRLPRO	RIG	1	Р	RIG SERVICE
1.00	12.00	DRLPRO	CIRC	1	Р	PUMP SWEEP & CIRC B/U FOR WIPER TRIP
0.50	12.50	DRLPRO	TRP	14	Р	FLOW CHECK, PUMP SLUG & WIPER TRIP PULL 6 STANDS
2.00	14.50	DRLPRO	RIG	8	P	REPAIR LINK DRILLERS SIDE TILT RAM BOLT, PULL 4 STANDS REPLACE OFF DRILLERS SIDE LINK TILT RAM BOLT

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# QEP Energy Company

## **QEP Energy Operations Summary Report**

91 3-047-5	2234		Surface Legal Lo 027007S02		Field Name RED W		State UTA	Н	٦	Well Configuration Type
ound Elev	ation (ft)	5,541.1	Casing Flange Elev	ation (ft) 5,541.10	Current KB to GI			Spud Date 8/9/2012	12.00	Rig Release Date
	Cum Dur	_ <del>'</del> -	-				10.00	***	12.00	9/6/2012 06:00
3.00	(hr) 17.50	DRLPRO	nase	Code TRP	14	Sub - Code	P	Ops Category	BACK	Com REAM F/ 4453 TO 4105 LOS
						•	ľ			RNS WHILE BACK REAMIN
1.00	18.50	DRLPRO		RIG	8		IP"		DEDA	IR TOP DRIVE ROTATOR
	3.3									AULIC HOSE
1.00	19.50	DRLPRO		TRP	14		P			OUT 4 STANDS BACK REAM 5 TO 3823 TOTAL LOSSES BL
2.00	21.50	DRLPRO		TRP	14	<b>↓</b> 3.1 2.2	Р		4829	N REAM F/ 4409 TO 4484, TO 4862, 5513 TO 5529, 557 00 CONDITION MUD WHILE
1 50	22.00	DDI DDO		OIDO.						JLATING
1.50	23.00	DRLPRO		CIRC			P		BUILD	JLATE WT UP F/ 8.9 TO 9.5, AND PUMP SWEEP, OMS UP GAS 6246
1.00	200 200	DRLPRO		TRP	2		P		P.O.0	H SECOND WIPER
		8/16/2012	507.550			End Depth (ft			ar Ice i none	The same of the sa
peratio	ns at Re	port Time:	ROT DRILL @	75 FPH		Operations Next	Report Peri	od: DRILL, WIP	ER TRIP, I	_OG
Dur (hr)	Cum Dur (hr)	Pł	nase	Code		Sub - Code		Ops Category	1 1	Com
11.50		DRLPRO		DRL	2		P		66' FP SPM, 390 P: MOTO 2.6 ST DRIVE RPM. 10 TO	FROM 4200' TO 4959 759', H, RUNNING 1 PUMPS AT 281 GPM, 1600 PSI, 250 TO SI DIFF. PRESSURE. MUD RIS A 1.5 BEND, 7/8 LOBE AGE, 60 RPM ON TOP 5, 73 MOTOR SPEED= 133 MUD WT. 8.9 TO 9.4,VIS 32 15 K ON BIT. 75' IN 4HRS.
0.50		DRLPRO	and the state of t	RIG	1		Р		RIG S	ERVICE
8.00	20.00	DRLPRO		DRL	2		P		49.5' F 88 SP TO 39 MOTO 2.6 ST DRIVE SPEE	FROM 4959 TO 5355 396', PH, RUNNING 1 PUMPS A M, 245 GPM, 1700 PSI, 250 0 PSI DIFF. PRESSURE. MUR IS A 1.5 BEND, 7/8 LOBE AGE, 45/50 RPM ON TOP E, 63 RPM ON MOTOR, DE 113 RPM. MUD WT. 8.9 5 32, 10 TO 15 K ON BIT.
2.00	22.00	DRLPRO		RIG	8		Р			R TOP DRIVE BODY
2.00		DRLPRO		DRL	2		P		DRILL 47.5' F 88 SP TO 39 MOTO 2.6 ST DRIVE SPEE 9.4,VI	NSION HYDRAULIC HOSE FROM 5355' TO 5450 95', FPH, RUNNING 1 PUMPS A' M, 245 GPM, 1700 PSI, 250 0 PSI DIFF. PRESSURE. ML PR IS A 1.5 BEND, 7/8 LOBE AGE, 45/50 RPM ON TOP E, 63 RPM ON MOTOR D= 113 RPM. MUD WT. 8.9 OF S 32, 10 TO 15 K ON BIT.
-		: 8/15/2012	POT DDILL O	120 DOD		End Depth (ft	•			·····
peratio	nis at Ke	port rime:	ROT DRILL @	120 RUP		Operations Nex	Report Peri	oa: DKILL		
Dur (hr)	Cum Dur (hr)	Ph	nase	Code		Sub - Code		Ops Category		Com
1.00		DRLPRO		TRP	1	222 0000	P	ope Juliogory	M/UD	IR TOOLS, SCRIBE, TEST



Well Name: RW 12B4-27B

.PI  3-047-5	2234		Surface Legal I 027007S02		Field Name RED WASH	State UTAH		Well Configuration Type
round Elev		5,541.1	Casing Flange Ele	evation (ft) 5,541.10			pud Date 8/9/2012 12:00	Rig Release Date 9/6/2012 06:00
Dur (hr)	Cum Dur (hr)	Př	nase	Code	Su	b - Code	Ops Category	Com
1.00	2.00	DRLPRO		ВОР	1	P	PULI BEN	L WEAR BUSHING DUE TO D IN MOTOR WILL NOT PAS ALL NEW WEAR BUSHING
0.50	2.50	DRLPRO		TRP	1	P	P/U &	& M/U 2 X 4 3/4"" DRILL LAR
1.00	3.50	DRLPRO		TRP	2	Р		M R/U WEATHERFORD LAY VN TRUCK
3.50	7.00	DRLPRO		TRP	2	P		& M/U 4 3/4"" HWDP & DRILL : T.I.H
0.50	7.50	DRLPRO		TRP	2	Р	R/D \	WEATHERFORD L/D TRUCK
1.00	8.50	DRLPRO		DRL	4	P		L OUT FLOAT EQUIPMENT ( ORMATION
0.50	9.00	DRLPRO		EQT	2	P		C & F.I.T 175 PSI EMW 9.4 PF 5 PPG
1.00		DRLPRO		DRL	2	<b>P</b>	FPH, SPM 250 F MOT 3.5 S DRIV RPM	L FROM 3705' TO 3726', 21' RUNNING 1 PUMPS AT 90, , 264 GPM, 1200 PSI, 190 TC PSI DIFF. PRESSURE. MUD OR IS A 1.5 BEND, 7/8 LOBE STAGE, 50 RPM ON TOP /E, 69 MOTOR SPEED= 119 . MUD WT. 8.5,VIS 28, 10 TC ON BIT.
0.50	10.50	DRLPRO		RIG	1	P	LUBI	RICATE RIG
6.50		DRLPRO		ОТН		U		AN OUT CUTTING & CEMEN M FLOW LINE
7.00	24.00	DRLPRO		DRL.	2	P	FPH, SPM 250 F MOT 3.5 S DRIV RPM	L FROM 3726' TO 4200', 67', RUNNING 1 PUMPS AT 90, 264 GPM, 1200 PSI, 190 TCPSI DIFF. PRESSURE. MUDOR IS A 1.5 BEND, 7/8 LOBESTAGE, 50 RPM ON TOP/E, 69 MOTOR SPEED= 119. MUD WT. 8.5,VIS 30, 10 TCON BIT.

Operations at Report Time: PICKING UP BHA

Operations Next Report Period: TRIP IN PICKING UP 3.5 DRILL PIPE, DRILL SHOE TRACK

Dur (hr)	Cum Dur (hr)	Phase	Code	Sub - Code	Ops Category	Com
8.00	8.00	DRLSUR	WOT	1	P	W.O.C AFTER TOP JOB
2.00	10.00	DRLSUR	ВОР	3	P	SLACK OFF CASING, NO DROP, NIPPLE DOWN FLOW LINE, CLEAN CELLAR, CUT CONDUCTOR, LIFT AND CUT CASING, 2.5' FROM BOTTOM OF CELLAR RING
2.00	12.00	DRLPRO	ВОР	1	P	WELD ON WELL HEAD AND TEST.1500 PSI 15 MIN
5.00	17.00	DRLPRO	ВОР	1	Р	NIPPLE UP BOP's

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Well Name: RW 12B4-27B

PI 13-047-5223			Surface Legal L 027007S02		Field Name RED WASH		State UTAH		Well Configuration Type
Ground Elevation		5,541.1	asing Flange Ele	vation (ft) 5,541.10	Current KB to GL (ft) 16	Current KB to CF (ft	t) Spt 16.00	ud Date 8/9/2012 12:0	Rig Release Date 9/6/2012 06:00
Dur (hr) (	m Dur (hr)	Pha	se	Code		Sub - Code		Ops Category	Com
	23.50	DRLPRO		ВОР	2		P		PJSM M/U TEST ASSY & TEST BOP, WING VALVES, TOP DRIVE, TIW VALVE, IBOP VALVE, CHOKE MANIFOLD 250 LOW 5MIN, 5,000 HIGH 15 MIN. HYDRIL 250 LOW 2,500 HIGH 15 MIN, TOP DRIVE HOSE, STANDPIPE & BACK TO MUD PUMP 250 LOW 5 MIN 4250 HIGH 15 MIN. TEST CASING TO 1,500 PSI 30 MIN. PIPE RAMS TETSED FOR 3.5 & 4.5
0.50 2	24.00	DRLPRO					Р		SET WEAR BUSHING

Operations at Report Time: WAITING ON CEMENT

End Depth (ftOTH): 3,695.0

Operations Next Report Period: WELD ON WELL HEAD, NIPPLE UP, TEST

Dur (hr)	Cum Dur (hr)	Phase	Code	Sub - Code	Ops Category	Com
2.50	2.50	DRLSUR	TRP	1	Р	L/D BHA & DIR ASSY
2.00	4.50	DRLSUR	CSG	1	P	PJSM RIG UP CASING CREW
9.50	14.00	DRLSUR	CSG	2	P	M/U SHOE TRACK & PUMP THUR OK RUN 7.625"" CASING FILL EVERY 5 JTS. BREAK CIRCULATE, CIRCULATE B/U @ 1000' & 2000' & 3000'[ WASH 3 JTS. TO BOTTOM SHOE @ 3690', LOST RETURNS AT 3060, ATTEMPT TO CIRCULATE @ 3469 NO RETURNS, ATTEMPT TO CIRCULATE AT 3597 GOT SOME RETURNS CIRCULATE BOTTOMS UP GOOD RETURNS, WASH TO BOTTOM TO 3695 WITH SOME RETURNS, STARTED LOSING RETURNS WHILE RECIPICATING PIPE ON BOTTOM.
1.50	15.50	DRLSUR	CIRC		P	CIRCULATE CASING LOST RETURNS HOLE GOT TIGHT STOP RECIPICATING PUMP AT SLOW RATE RIG UP CEMENTERS



Well Name: RW 12B4-27B

047-52234		ŭ	ield Name RED WASH	State UTAH	Well Configuration Type
und Elevation (ft)	Casing Flan		KB to GL (ft) Current KB to 0		Rig Release Date 9/6/2012 06:00
r (hr) Cum D	ur Phase	Code	Sub - Code		
	DRLSUR	CMT	2	P Ops Category	PJSM RIG UP HALLIBURTON TE LINES TO 3000 PSI, PUMP 5 BBL H2O, PUMP 15 BBLS 20% CACL H2O @ 9.5 #, PUMP 5BBL WATE SPACER, 21 BBLS SUPER FLUS @ 10#, PUMP 5 BBL H20 SPACE PUMP 30 BBLS CEMENT @ 10.5 4.19 YIELD 27.09 GA/SKL, PUMP BBLS H2O, PUMP 20 BBLS SUPE FLUSH @ 10#, PUMP 5 BBLS H2P PUMP 30 BBLS CEMENT @ 10.5 4.19 YIELD 27.09 GAL/SK, PUMP 6 BBLS/MIN PUMP 208 BBLS LE/ CEMENT @ 11# 2.95 YIELD 17.4 GAL/SK, PUMP 49 BBLS TAIL CEMENT @ 13.5# 1.48 YIELD 6.8 GAL/SK, SHUT DOWN DROP PLUG, WASH PUMP, PUMP 167 BBLS DISPLACEMENT, FINAL LI 260 BUMP PLUG @ 1000 PSI, CHECK FLOATS .5 BBLS BACK, LOST RETURNS BEFORE PUMPING CEMENT, NO RETURN PUMPING CEMENT
1	DRLSUR	WOT CMT	1 2	P	WAIT ON CEMENT TO TOP OUT
			-		PJSM, RIG UP 160' 1"" PIPE, TOF OUT WITH 22 BBLS, 100 SKS OF 14.8 PPG CEMENT, @ 20 BBLS CEMENT TO SURFACE, FLUSH CONDUCTOR, FLOWLINES AND GAS BUSTER

Operations Next Report Period: RUN SURFACE CASING, CEMENT

Our (hr)	Cum Dur (hr)	Phase	Code	Sub - Code	Ops Category	Com
1.50	1.50	DRLSUR	REAM	1	P	WASH BACK TO BOTTOM TO 3108' PUMP 40 BBLS LCM PILL @ 30 PPB
7.50	9.00	DRLSUR	DRL	2	P	DRILL FROM 3108' TO 3695' = 587 FT. @ 73.3 FPH, 15-25 K ON BIT, PUMPS 2 X 90 SPM, 528 GPM, SPI 1294 PSI, 55 RPM ON TOP DRIVE, 90 RPM MUD MOTOR, MW 9.2 PPG VIS 36 10% TO 12% LCM AIR ON 850-1100 CFM TOTAL LOSSES 720 BBLS
0.50	9.50	DRLSUR	RIG	1	P	LUBRICATE RIG
1.00	10.50	DRLSUR	CIRC	1	P	PUMP LCM SWEEP & CIRCULATE B/U W/AIR & ONE B/U WITHOUT AIR
4.50	15.00	DRLSUR	TRP	2	P	PULL 4 STANDS & WASH & REAM F/3366 TO 3086' & P.O.O.H WORK TIGHT SPOTS
3.50	18.50	DRLSUR	TRP	2	P	TRIP IN HOLE, STAGE 5 TO 8 STANDS TO ENSURE CIRC, REAN TO TIGHT SPOTS 3350, 3497
0.50	19 00	DRLSUR	CIRC	1	P	CIRCULATE BOTTOMS

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Well Name: RW 12B4-27B

арі <b>43-047-</b> 5		Surface Lega 027007S(	l'	Field Name RED WASH	State UTAH	Well Configuration Type
Ground Elev	ation (ft)	Casing Flange E 5,541.1	levation (ft) Curren 5,541.10	t KB to GL (ft) Current KE 16.00	to CF (ft) Spud Date 8/9/201:	Rig Release Date 9/6/2012 06:00
Dur (hr)	Cum Dur (hr)	Phase	Code	Sub - Code	Öps Category	Com
1.00	20.00	DRLSUR	TRP	14	Р	SHORT TRIP 9 STANDS THRU TIGHT AREA, NO TIGHT SPOTS
1.00	21.00	DRLSUR	CIRC	1	P	CIRCULATE 2 SWEEPS, RIG UP LAY DOWN TRUCK
3.00		DRLSUR	TRP	3	P	PJSM LAY DOWN DRILL PIPE

Report End Date: 8/11/2012

Operations at Report Time: STAGE IN HOLETO KEEP CIRC @

End Depth (ftOTH): 3,108.0

Operations Next Report Period: DRILL AHEAD TO 3695+-

Dur (hr)	Cum Dur (hr)	Phase	Code	Sub - Code	Ops Category	Com
8.00		DRLSUR	DRL	2	P	DRILL FROM 1495' TO 2509' = 1014' FT. @ 126.76 FPH, 5-20 K ON BIT, PUMPS 2 X 105 SPM, 615 GPM, SPP 1450 PSI, 55 RPM ON TOP DRIVE, 104 RPM MUD MOTOR, MW 8.9 PPG VIS 33
0.50 0.50	2000 1702	DRLSUR DRLSUR	RIG CIRC	1	P P	LUBRICATE RIG
4.00	13.00	DRLSUR	TRP	14	P	SHORT TRIP TO 90' & T.I.H TO 1938' WASH & REAM 1938' TO 2509'
8.50	21.50	DRLSUR	DRL	2	P	DRILL FROM 2509' TO 3108' = 599' FT. @ 70.4 FPH, 5-20 K ON BIT, PUMPS 2 X 105 SPM, 615 GPM, SPP 1450 PSI, 55 RPM ON TOP DRIVE, 104 RPM MUD MOTOR, MW 8.9 PPG VIS 33 10% TO 12% LCM AIR ON @ 2650 850-1100 CFM LOST RETURNS TOTAL 150 BBLS
0.50	22.00	DRLSUR	TRP	14	<b>P</b>	P.O.O.H 6 STANDS TO GET RETURNS BACK
2.00	24.00	DRLSUR	CIRC	1	P	CIRCULATE & PUMP 60 BBLS OF 20% LCM PILL & WASH BACK TO BOTTOM

Report End Date: 8/10/2012

Operations at Report Time: DRILLING @ 125 FPH

End Depth (ftOTH): 90.0

Operations Next Report Period: DRILL, WIPER TRIP

Dur (hr)	Cum Dur (hr)	Phäse	Code	Sub - Code	Ops Category	Com
2.00	2.00	DRLSUR	EQT	5	P	TEST PRECISON AIR LINES & EQUIPMENT T/1350 PSI
1.00	3.00	DRLSUR	EQT:	5	P P P P P P P P P P P P P P P P P P P	PUMP THRU ALL SURFACE LINES & TEST
3.00	6.00	DRLSUR	TRP	1	P	PICK UP DIRECTIONAL TOOLS, TEST MOTOR, SCRIBE & MAKE UP BIT
6.50	12.50	DRLSUR	DRL	2	P	DRILL FROM 90' TO 808' = 718' FT. @ 110 FPH, 5-10 K ON BIT, PUMPS 2 X 110 SPM, 645 GPM, SPP 700 PSI, 55 RPM ON TOP DRIVE, 110 RPM MUD MOTOR,
0.50	13.00	DRLSUR	ОТН	₹.	P	MW 8.4 PPG VIS 33 PULL ROTATE HEAD PICK UP JARS INSTALL ROT HEAD

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i -047-5	2234		Surface Legal Location 027007S023E27	Field Name RED WAS	<b>_</b>	ate	Well Configuration Type
	vation (ft)		Casing Flange Elevation (ft)	Current KB to GL (ft)	-	TAH Spud Date	Rig Release Date
	- A B	5,541.1	5,54	11.10	16.00 16.		00 9/6/2012 06:00
ur (hr)	Cum Dur (hr)	PI	nase	Code	Sub - Code	Ops Category	Com
0.50	13.50	DRLSUR	DRL	2	P		DRILL FROM 808' TO 898' = 90'   @ 180 FPH, 5-10 K ON BIT, PUMPS 2 X 110 SPM, 645 GPM, SPP 700 PSI, 55 RPM ON TOP DRIVE, 110 RPM MUD MOTOR, MW 8.4 PPG VIS 33
0.50	14.00	DRLSUR	RIG	1.	P		DAILY RIG SERVICE
5.00		DRLSUR	RIG	8	P		TROUBLE SHOOT TOP DRIVE, TOOH, REPAIR BLOWER MOTO TIH
5.00		DRLSUR	DRL	2	P		DRILL FROM 898' TO 1495' = 59 FT. @ 119 FPH, 5-20 K ON BIT, PUMPS 2 X 110 SPM, 645 GPM, SPP 700 PSI, 55 RPM ON TOP DRIVE, 110 RPM MUD MOTOR, MW 8.4 PPG VIS 33
		: 8/9/2012			End Depth (ftOTH): 0.0		
eratio	ons at Re	port Time:	TESTING AIR JAMMER	LINES OF	perations Next Report F	<b>Period:</b> PICK UP BHA,	DRILL
1	Çum Dur						
ır (hr) 12.00	(hr) 12.00		nase LOC	Çode 4	Sub - Code	Ops Category	Com
							WAIT ON TOP DRIVE, RIG UP FLARE LINES, RIG FLOOR, SERVICE LOOP, R/U AIR PACKAGE, WELD ON CONDUCTOR PIPE & R/U ROT HEAD
1.50	23.50	MIRU	LOC	4	P		RIG UP, TOP DRIVE/KELLY HOS ALL LOWER SUBS, IBOP AND FUNCTION TEST, CHANGE MAII HYDRAULIC LINE TO TOP DRIVI WITH TESCO HAND & FRONTIE ELECTRICIAN, HOOK UP FLOW LINE TO ROT HEAD, INSTALL 2'FILL LINE & 2" DRAIN LINE TO CONDUCTOR & ROT HEAD, RIG UP BLEED OFF HOSES FROM A JAMMER LINES TO FLOW LINE, BUILD SPUD MUD
0.50	24.00	MIRU	LOC	4	P		TEST AIR JAMMER EQUIPTMEN
		8/8/2012			End Depth (ftOTH): 0.0		
eratic	ons at Re	port Time:	RIGGING UP	Oβ	oerations Next Report F	Period: RIG UP, WELE DRIVE& RIG U	O CONDUCTOR ON, WAIT ON TOP P SAME
ır (hr)	Cum Dur (hr)	p	nase	Code	Sub - Code	One Cetegory	
2.00		MIRU	LOC	3	P	Ops Category	RIG DOWN AND MOVE RIG TO THE RW12B4-27B AND RIG UP RAISE DERRICK AT 1730 WITH TRUCKS
	24 00	MIRU	LOC	4	P		RIG UP BY HAND 95 % MOVE
12.00		: 8/7/2012			End Depth (ftOTH): 0.0		90% RIG UP

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# SEP.

## **QEP Energy Operations Summary Report**

	2234	l o z	rface Legal Location 27007S023E27	Field Name RED WASH	State UTAI		Well Configuration Type
ind Elev	ation (ft)		ng Flange Elevation (ft) 5,541	Current KB to GL (ft)	Current KB to CF (ft)	Spud Date	Rig Release Date
	Cum Dur			<u> </u>	16.00	8/9/2012 12	2:00 9/6/2012 06:00
r (hr) 4.00 (		RDMO	LOC	ode Sut	p-Code	Ops Category	RIG DOWN AND HAUL RIG TO NEW LOCATION. RIG DOWN TO DRIVE AND SEND IN TO FRONTIER SHOP. RIG DOWN MITANKS AND HAUL, GAS BUSTEF PUMPS, CHOKE HOUSE. MOVE DP, DC'S, AND CASING. LAY OVIDERRICK AND DRESS FOR MOVE 80% RIGGED DOWN, 50% MOVE 0% RIGGED UP.
0.00		RDMO	ОТН		P		WAIT ON DAYLIGHTS.
		7/4/2012	ODI ID 00070	End Do	epth (ftOTH): 0.0		
eratio	ons at Re	port Time: PRE	SPUD COSTS	Operatio	ns Next Report Perio	od:	
· (b.e.)	Cum Dur	Dhana					
r (hr)	(hr)	Phase		ode Sub	o - Code	Ops Category	Com

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